



NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

PERMITTEE: UTILITIES BOARD OF THE CITY OF GREENSBORO
POST OFFICE BOX 546
GREENSBORO, ALABAMA 36744

FACILITY LOCATION: GREENSBORO LAGOON (2.0) MGD
649 COUNTY ROAD 19
GREENSBORO, ALABAMA
HALE COUNTY

PERMIT NUMBER: AL0057193

RECEIVING WATERS: BLACK WARRIOR RIVER
COLWELL CREEK (STORMWATER ONLY)

In accordance with and subject to the provisions of the Federal Water Pollution Control Act, as amended, 33 U.S.C. §§1251-1378 (the "FWPCA"), the Alabama Water Pollution Control Act, as amended, Code of Alabama 1975, §§ 22-22-1 to 22-22-14 (the "AWPCA"), the Alabama Environmental Management Act, as amended, Code of Alabama 1975, §§22-22A-1 to 22-22A-15, and rules and regulations adopted thereunder, and subject further to the terms and conditions set forth in this permit, the Permittee is hereby authorized to discharge into the above-named receiving waters.

ISSUANCE DATE:

EFFECTIVE DATE:

EXPIRATION DATE:

Draft

Alabama Department of Environmental Management

MUNICIPAL SECTION
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
PERMIT

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ATTACHMENT:

FORM 421

NON-COMPLIANCE NOTIFICATION FORM

PART I **DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS** **A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS**

1. Outfall 0012 Discharge Limits

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to discharge from Outfall 0012, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

Parameter	Discharge Limitations*						Monitoring Requirements**				
	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Daily Minimum	Daily Maximum	Percent Removal	(1) Sample Location	(2) Sample Type	(3) Measurement Frequency	(4) Seasonal
Oxygen, Dissolved (DO) 00300 1 0 0	*****	*****	*****	*****	REPORT mg/l	*****	*****	E	GRAB	F	*****
pH 00400 1 0 0	*****	*****	*****	*****	6.0 S.U.	9.0 S.U.	*****	E	GRAB	F	*****
Solids, Total Suspended 00530 1 0 0	1501 lbs/day	2251 lbs/day	90.0 mg/l	135 mg/l	*****	*****	*****	E	COMP24	F	*****
Solids, Total Suspended 00530 G 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	I	COMP24	F	*****
Nitrogen, Ammonia Total (As N) 00610 1 0 0	333 lbs/day	500 lbs/day	20.0 mg/l	30.0 mg/l	*****	*****	*****	E	COMP24	F	*****
Nitrogen, Kjeldahl Total (As N) 00625 1 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	E	COMP24	G	*****
Nitrite Plus Nitrate Total 1 Det. (As N) 00630 1 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	E	COMP24	G	*****
Phosphorus, Total (As P) 00665 1 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	E	COMP24	G	*****
Flow, In Conduit or Thru Treatment Plant 50050 1 0 0	REPORT MGD	*****	*****	*****	*****	REPORT MGD	*****	E	CONTIN	A	*****
Chlorine, Total Residual See note (5) 50060 1 0 0	*****	*****	*****	*****	*****	1.0 mg/l	*****	E	GRAB	F	*****

* See Part II.C.1. (Bypass); Part II.C.2. (Upset)

** Monitoring Requirements

(1) Sample Location

I – Influent

E – Effluent

X – End Chlorine Contact Chamber

K - Percent Removal of the Monthly Avg. Influent Concentration

from the Monthly Avg. Effluent Concentration.

RS - Receiving Stream

(2) Sample Type:

CONTIN - Continuous

INSTAN - Instantaneous

COMP-8 - 8-Hour Composite

COMP24 - 24-Hour Composite

GRAB – Grab

CALCTD - Calculated

(3) Measurement Frequency: See also Part I.B.2.

A - 7 days per week

B - 5 days per week

C - 3 days per week

D - 2 days per week

E - 1 day per week

(4) Seasonal Limits:

S = Summer (May – November)

W = Winter (December - April)

ECS = E. coli Summer (June – September)

ECW = E. coli Winter (October – May)

Q - For Effluent Toxicity

Testing, see Provision IV.B.

(5) See Part IV.C. for Total Residual Chlorine (TRC). Monitoring for TRC is applicable if chlorine is utilized for disinfection purposes. If monitoring is not applicable during the monitoring period, enter "NODI=9" on the monthly DMR.

2. Outfall 0012 Discharge Limits (continued)

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to discharge from Outfall 0012, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

Parameter	Discharge Limitations*						Monitoring Requirements**			
	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Daily Minimum	Daily Maximum	Percent Removal	(1) Sample Location	(2) Sample Type	(3) Measurement Frequency
E. Coli 51040 I 0 0	*****	*****	126 col/100mL	*****	*****	235 col/100mL	*****	E	GRAB	F
BOD, Carbonaceous 05 Day, 20C 80082 I 0 0	417 lbs/day	625 lbs/day	25.0 mg/l	37.5 mg/l	*****	*****	*****	E	COMP24	F
BOD, Carbonaceous 05 Day, 20C 80082 G 0 0	REPORT lbs/day	REPORT lbs/day	REPORT mg/l	REPORT mg/l	*****	*****	*****	I	COMP24	F
BOD, Carb-5 Day, 20 Deg C, Percent Remvl 80091 K 0 0	*****	*****	*****	*****	*****	*****	85.0%	K	CALCTD	G
Solids, Suspended Percent Removal 81011 K 0 0	*****	*****	*****	*****	*****	*****	65.0%	K	CALCTD	G

* See Part II.C.1. (Bypass); Part II.C.2. (Upset)

** Monitoring Requirements

(1) Sample Location

I - Influent

E - Effluent

X - End Chlorine Contact Chamber

K - Percent Removal of the Monthly Avg. Influent Concentration from the Monthly Avg. Effluent Concentration.

RS - Receiving Stream

(2) Sample Type:

CONTIN - Continuous

INSTAN - Instantaneous

COMP-8 - 8-Hour Composite

COMP24 - 24-Hour Composite

GRAB - Grab

CALCTD - Calculated

(3) Measurement Frequency: See also Part I.B.2.

A - 7 days per week

B - 5 days per week

C - 3 days per week

D - 2 days per week

E - 1 day per week

(4) Seasonal Limits:

S = Summer (May - November)

W = Winter (December - April)

ECS = E. coli Summer (June - September)

ECW = E. coli Winter (October - May)

Q - For Effluent Toxicity Testing, see Provision IV.B.

3. Outfall 001S Discharge Limits - Semi-Annual Monitoring

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to discharge from Outfall 001S, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

<u>Parameter</u>	Discharge Limitations*						Monitoring Requirements**				
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Minimum</u>	<u>Daily Maximum</u>	<u>Percent Removal</u>	(1) Sample Location	(2) Sample Type	(3) Measurement Frequency	(4) Seasonal
Copper Total Recoverable 01119 1 0 0	*****	*****	REPORT mg/l	*****	*****	REPORT mg/l	*****	E	GRAB	S	*****

* See Part II.C.1. (Bypass); Part II.C.2. (Upset)

** Monitoring Requirements

(1) Sample Location

I - Influent

E - Effluent

X - End Chlorine Contact Chamber

K - Percent Removal of the Monthly Avg. Influent Concentration

from the Monthly Avg. Effluent Concentration.

RS - Receiving Stream

(2) Sample Type:

CONTIN - Continuous

INSTAN - Instantaneous

COMP-8 - 8-Hour Composite

COMP24 - 24-Hour Composite

GRAB - Grab

CALCTD - Calculated

(3) Measurement Frequency: See also Part I.B.2.

A - 7 days per week

B - 5 days per week

C - 3 days per week

D - 2 days per week

E - 1 day per week

S - Semi-Annual

(4) Seasonal Limits:

S = Summer (May - November)

W = Winter (December - April)

ECS = E. coli Summer (June - September)

ECW = E. coli Winter (October - May)

Q - For Effluent Toxicity

Testing, see Provision IV.B.

4. Outfall 001T Discharge Limits

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to discharge from Outfall 001T, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

Parameter	Discharge Limitations*						Monitoring Requirements**			
	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Daily Minimum	Daily Maximum	Percent Removal	(1) Sample Location	(2) Sample Type	(3) Measurement Frequency
Toxicity, Ceriodaphnia Acute 61425 1 0 0	*****	Pass = 0 Fail = 1	*****	*****	*****	*****	*****	E	COMP24	Q
Toxicity, Pimephales Acute 61427 1 0 0	*****	Pass = 0 Fail = 1	*****	*****	*****	*****	*****	E	COMP24	Q

* See Part II.C.1. (Bypass); Part II.C.2. (Upset)

** Monitoring Requirements

(1) Sample Location

I - Influent

E - Effluent

X - End Chlorine Contact Chamber

K - Percent Removal of the Monthly Avg. Influent Concentration from the Monthly Avg. Effluent Concentration.

RS - Receiving Stream

(2) Sample Type:

CONTIN - Continuous

INSTAN - Instantaneous

COMP-8 - 8-Hour Composite

COMP24 - 24-Hour Composite

GRAB - Grab

CALCTD - Calculated

(3) Measurement Frequency: See also Part I.B.2.

A - 7 days per week

B - 5 days per week

C - 3 days per week

D - 2 days per week

E - 1 day per week

(4) Seasonal Limits:

S = Summer (May - November)

W = Winter (December - April)

ECS = E. coli Summer (June - September)

ECW = E. coli Winter (October - May)

Q - For Effluent Toxicity Testing, see Provision IV.B.

5. Outfall 002S Discharge Limits

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to discharge from Outfall 002S, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

Parameter	Discharge Limitations*						Monitoring Requirements**				
	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Daily Minimum	Daily Maximum	Percent Removal	(1) Sample Location	(2) Sample Type	(3) Measurement Frequency	(4) Seasonal
pH	*****	*****	*****	*****	REPORT S.U.	REPORT S.U.	*****	E	GRAB	J	*****
00400 1 0 0											
Solids, Total Suspended	*****	*****	*****	*****	*****	REPORT mg/l	*****	E	GRAB	J	*****
00530 1 0 0											
Nitrogen, Ammonia Total (As N)	*****	*****	*****	*****	*****	REPORT mg/l	*****	E	GRAB	J	*****
00610 1 0 0											
Nitrogen, Kjeldahl Total (As N)	*****	*****	*****	*****	*****	REPORT mg/l	*****	E	GRAB	J	*****
00625 1 0 0											
Nitrite Plus Nitrate Total 1 Det. (As N)	*****	*****	*****	*****	*****	REPORT mg/l	*****	E	GRAB	J	*****
00630 1 0 0											
Phosphorus, Total (As P)	*****	*****	*****	*****	*****	REPORT mg/l	*****	E	GRAB	J	*****
00665 1 0 0											
Oil and Grease	*****	*****	*****	*****	*****	15 mg/l	*****	E	GRAB	J	*****
03582 1 0 0											
Flow, In Conduit or Thru Treatment Plant	*****	*****	*****	*****	*****	REPORT MGD	*****	E	CALCTD	J	*****
50050 1 0 0											
BOD, Carbonaceous 05 Day, 20C	*****	*****	*****	*****	*****	REPORT mg/l	*****	E	GRAB	J	*****
80082 1 0 0											
E. Coli	*****	*****	*****	*****	*****	REPORT col/100mL	*****	E	GRAB	J	*****
51040 1 0 0											

* See Part II.C.1. (Bypass); Part II.C.2. (Upset)

** Monitoring Requirements

(1) Sample Location

I - Influent

E - Effluent

X - End Chlorine Contact Chamber

K - Percent Removal of the Monthly Avg. Influent Concentration from the Monthly Avg. Effluent Concentration.

RS - Receiving Stream

(2) Sample Type:

CONTIN - Continuous

INSTAN - Instantaneous

COMP-8 - 8-Hour Composite

COMP24 - 24-Hour Composite

GRAB - Grab

CALCTD - Calculated

(3) Measurement Frequency: See also Part I.B.2.

A - 7 days per week

B - 5 days per week

C - 3 days per week

D - 2 days per week

E - 1 day per week

F - 2 days per month

G - 1 day per month

H - 1 day per quarter

J - Annual

Q - For Effluent Toxicity Testing, see Provision IV.B.

(4) Seasonal Limits:

S = Summer (May - November)

W = Winter (December - April)

ECS = E. coli Summer (June - September)

ECW = E. coli Winter (October - May)

6. Outfall 003S Discharge Limits

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to discharge from Outfall 003S, which is described more fully in the Permittee's application. Such discharge shall be limited and monitored by the Permittee as specified below:

Parameter	Discharge Limitations*						Monitoring Requirements**				
	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Daily Minimum	Daily Maximum	Percent Removal	(1) Sample Location	(2) Sample Type	(3) Measurement Frequency	(4) Seasonal
pH	*****	*****	*****	*****	REPORT S.U.	REPORT S.U.	*****	E	GRAB	J	*****
00400 1 0 0											
Solids, Total Suspended	*****	*****	*****	*****	*****	REPORT mg/l	*****	E	GRAB	J	*****
00530 1 0 0											
Nitrogen, Ammonia Total (As N)	*****	*****	*****	*****	*****	REPORT mg/l	*****	E	GRAB	J	*****
00610 1 0 0											
Nitrogen, Kjeldahl Total (As N)	*****	*****	*****	*****	*****	REPORT mg/l	*****	E	GRAB	J	*****
00625 1 0 0											
Nitrite Plus Nitrate Total 1 Det. (As N)	*****	*****	*****	*****	*****	REPORT mg/l	*****	E	GRAB	J	*****
00630 1 0 0											
Phosphorus, Total (As P)	*****	*****	*****	*****	*****	REPORT mg/l	*****	E	GRAB	J	*****
00665 1 0 0											
Oil and Grease	*****	*****	*****	*****	*****	15 mg/l	*****	E	GRAB	J	*****
03582 1 0 0											
Flow, In Conduit or Thru Treatment Plant	*****	*****	*****	*****	*****	REPORT MGD	*****	E	CALCTD	J	*****
50050 1 0 0											
BOD, Carbonaceous 05 Day, 20C	*****	*****	*****	*****	*****	REPORT mg/l	*****	E	GRAB	J	*****
80082 1 0 0											
E. Coli	*****	*****	*****	*****	*****	REPORT col/100mL	*****	E	GRAB	J	*****
51040 1 0 0											

* See Part II.C.1. (Bypass); Part II.C.2. (Upset)

** Monitoring Requirements

(1) Sample Location

I - Influent

E - Effluent

X - End Chlorine Contact Chamber

K - Percent Removal of the Monthly Avg. Influent Concentration

from the Monthly Avg. Effluent Concentration.

RS - Receiving Stream

(2) Sample Type:

CONTIN - Continuous

INSTAN - Instantaneous

COMP-8 - 8-Hour Composite

COMP24 - 24-Hour Composite

GRAB - Grab

CALCTD - Calculated

(3) Measurement Frequency: See also Part I.B.2.

A - 7 days per week

B - 5 days per week

C - 3 days per week

D - 2 days per week

E - 1 day per week

F - 2 days per month

G - 1 day per month

H - 1 day per quarter

J - Annual

Q - For Effluent Toxicity

Testing, see Provision IV.B.

(4) Seasonal Limits:

S = Summer (May - November)

W = Winter (December - April)

ECS = E. coli Summer (June - September)

ECW = E. coli Winter (October - May)

(5) See Part IV.C. for Total Residual Chlorine (TRC). Monitoring for TRC is applicable if chlorine is utilized for disinfection purposes. If monitoring is not applicable during the monitoring period, enter "NODI=9" on the monthly DMR.

B. DISCHARGE MONITORING AND RECORD KEEPING REQUIREMENTS

1. Representative Sampling

Sample collection and measurement actions shall be representative of the volume and nature of the monitored discharge and shall be in accordance with the provisions of this permit. The effluent sampling point shall be at the nearest accessible location just prior to discharge and after final treatment, unless otherwise specified in the permit.

2. Measurement Frequency

Measurement frequency requirements found in Provision I.A. shall mean:

- a. Seven days per week shall mean daily.
- b. Five days per week shall mean any five days of discharge during a calendar weekly period of Sunday through Saturday.
- c. Three days per week shall mean any three days of discharge during a calendar week.
- d. Two days per week shall mean any two days of discharge during a calendar week.
- e. One day per week shall mean any day of discharge during a calendar week.
- f. Two days per month shall mean any two days of discharge during the month that are no less than seven days apart. However, if discharges occur only during one seven-day period in a month, then two days per month shall mean any two days of discharge during that seven day period.
- g. One day per month shall mean any day of discharge during the calendar month.
- h. Quarterly shall mean any day of discharge during each calendar quarter.
- i. The Permittee may increase the frequency of sampling, listed in Provisions I.B.2.a through I.B.2.h; however, all sampling results are to be reported to the Department.

3. Test Procedures

For the purpose of reporting and compliance, Permittees shall use one of the following procedures:

- a. For parameters with an EPA established Minimum Level (ML), report the measured value if the analytical result is at or above the ML and report "0" for values below the ML. Test procedures for the analysis of pollutants shall conform to 40 CFR Part 136 and guidelines published pursuant to Section 304(h) of the FWPCA, 33 U.S.C. Section 1314(h). If more than one method for analysis of a substance is approved for use, a method having a minimum level lower than the permit limit shall be used. If the minimum level of all methods is higher than the permit limit, the method having the lowest minimum level shall be used and a report of less than the minimum level shall be reported as zero and will constitute compliance, however should EPA approve a method with a lower minimum level during the term of this permit the Permittee shall use the newly approved method.
- b. For pollutants parameters without an established ML, an interim ML may be utilized. The interim ML shall be calculated as 3.18 times the Method Detection Level (MDL) calculated pursuant to 40 CFR Part 136, Appendix B.

Permittees may develop an effluent matrix-specific ML, where an effluent matrix prevents attainment of the established ML. However, a matrix specific ML shall be based upon proper laboratory method and technique. Matrix-specific MLs must be approved by the Department, and may be developed by the Permittee during permit issuance, reissuance, modification, or during compliance schedule.

In either case the measured value should be reported if the analytical result is at or above the ML and "0" reported for values below the ML.

- c. For parameters without an EPA established ML, interim ML, or matrix-specific ML, a report of less than the detection limit shall constitute compliance if the detection limit of all analytical methods is higher than the permit limit. For the purpose of calculating a monthly average, "0" shall be used for values reported less than the detection limit.

The Minimum Level utilized for procedures a and b above shall be reported on the Permittee's DMR. When an EPA approved test procedure for analysis of a pollutant does not exist, the Director shall approve the procedure to be used.

4. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the Permittee shall record the following information:

- a. The facility name and location, point source number, date, time and exact place of sampling;

- b. The name(s) of person(s) who obtained the samples or measurements;
- c. The dates and times the analyses were performed;
- d. The name(s) of the person(s) who performed the analyses;
- e. The analytical techniques or methods used, including source of method and method number; and
- f. The results of all required analyses.

5. Records Retention and Production

- a. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the above reports or the application for this permit, for a period of at least three years from the date of the sample measurement, report or application. This period may be extended by request of the Director at any time. If litigation or other enforcement action, under the AWPCA and/or the FWPCA, is ongoing which involves any of the above records, the records shall be kept until the litigation is resolved. Upon the written request of the Director or his designee, the Permittee shall provide the Director with a copy of any record required to be retained by this paragraph. Copies of these records should not be submitted unless requested.
- b. All records required to be kept for a period of three years shall be kept at the permitted facility or an alternate location approved by the Department in writing and shall be available for inspection.

6. Reduction, Suspension or Termination of Monitoring and/or Reporting

- a. The Director may, with respect to any point source identified in Provision I.A. of this permit, authorize the Permittee to reduce, suspend or terminate the monitoring and/or reporting required by this permit upon the submission of a written request for such reduction, suspension or termination by the Permittee, supported by sufficient data which demonstrates to the satisfaction of the Director that the discharge from such point source will continuously meet the discharge limitations specified in Provision I.A. of this permit.
- b. It remains the responsibility of the Permittee to comply with the monitoring and reporting requirements of this permit until written authorization to reduce, suspend or terminate such monitoring and/or reporting is received by the Permittee from the Director.

7. Monitoring Equipment and Instrumentation

All equipment and instrumentation used to determine compliance with the requirements of this permit shall be installed, maintained, and calibrated in accordance with the manufacturer's instructions or, in the absence of manufacturer's instructions, in accordance with accepted practices. At a minimum, flow measurement devices shall be calibrated at least once every 12 months.

C. DISCHARGE REPORTING REQUIREMENTS

1. Reporting of Monitoring Requirements

- a. The Permittee shall conduct the required monitoring in accordance with the following schedule:
 - (1) **MONITORING REQUIRED MORE FREQUENTLY THAN MONTHLY AND MONTHLY** shall be conducted during the first full month following the effective date of coverage under this permit and every month thereafter.
 - (2) **QUARTERLY MONITORING** shall be conducted at least once during each calendar quarter. Calendar quarters are the periods of January through March, April through June, July through September, and October through December. The Permittee shall conduct the quarterly monitoring during the first complete calendar quarter following the effective date of this permit and is then required to monitor once during each quarter thereafter. Quarterly monitoring should be reported on the last DMR due for the quarter (i.e., March, June, September and December DMRs).
 - (3) **SEMIANNUAL MONITORING** shall be conducted at least once during the period of January through June and at least once during the period of July through December. The Permittee shall conduct the semiannual monitoring during the first complete calendar semiannual period following the effective date of this permit and is then required to monitor once during each semiannual period thereafter. Semiannual monitoring may be done anytime during the semiannual period, unless restricted elsewhere in this permit, but it should be reported on the last DMR due for the month of the semiannual period (i.e., June and December DMRs).
 - (4) **ANNUAL MONITORING** shall be conducted at least once during the period of January through December. The Permittee shall conduct the annual monitoring during the first complete calendar annual period following the effective date of this permit and is then required to monitor once during each annual period thereafter.

Annual monitoring may be done anytime during the year, unless restricted elsewhere in this permit, but it should be reported on the December DMR.

- b. The Permittee shall submit discharge monitoring reports (DMRs) on the forms approved by the Department and in accordance with the following schedule:
- (1) **REPORTS OF MORE FREQUENTLY THAN MONTHLY AND MONTHLY TESTING** shall be submitted on a monthly basis. The first report is due on the 28th day of the month following the month the permit becomes effective. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period.
 - (2) **REPORTS OF QUARTERLY TESTING** shall be submitted on a quarterly basis. The first report is due on the 28th day of the month following the month the permit becomes effective. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period.
 - (3) **REPORTS OF SEMIANNUAL TESTING** shall be submitted on a semiannual basis. The reports are due on the 28th day of JANUARY and the 28th day of JULY. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period.
 - (4) **REPORTS OF ANNUAL TESTING** shall be submitted on an annual basis. Unless specified elsewhere in the permit, the first report is due on the 28th day of JANUARY. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period.
- c. The Department is utilizing a web-based electronic environmental (E2) DMR reporting system for submittal of DMRs. **If the permittee is not already participating in the E2 DMR system, the permittee must apply for participation in the system within 180 days of coverage under this permit unless the facility submits in writing valid justification as to why they cannot participate and the Department approves in writing utilization of hard copy DMR submittals.** Once the permittee is enrolled in the E2 DMR system, the permittee must utilize the system for the submittal of DMRs unless otherwise allowed by this permit. To participate in the E2 DMR system, the Permittee Participation Package may be downloaded online at <https://e2.adem.alabama.gov/npdes>. If the E2 DMR system is down (i.e., electronic submittal of DMR data is unable to be completed due to technical problems originating with the Department's system: this could include entry/submittal issues with an entire set of DMRs or individual parameters), the permittee is not relieved of their obligation to submit DMR data to the Department by the required submittal date. However, if the E2 DMR system is down on the 28th day of the month or is down for an extended period of time as determined by the Department when a DMR is required to be submitted, the facility may submit the data in an alternate manner and format acceptable to the Department. Preapproved alternate acceptable methods include faxing, e-mailing, mailing, or hand-delivery of data such that they are received by the required reporting date. Within five calendar days of the E2 DMR system resuming operation, the permittee shall enter the data into the E2 DMR system, unless an alternate timeframe is approved by the Department. An attachment should be included with the E2 DMR submittal verifying the original submittal date (date of the fax, copy of dated e-mail, or hand-delivery stamped date). If a permittee is allowed to submit via the US Postal Service, the DMR must be legible and bear an original signature. Photo and electronic copies of the signature are not acceptable and shall not satisfy the reporting requirements of this permit. If the permittee, using approved analytical methods as specified in Provision I.B.2, monitors any discharge from a point source for a limited substance identified in Provision I.A of this permit more frequently than required by this permit, the results of such monitoring shall be included in the calculation and reporting of values on the DMR form and the increased frequency shall be indicated on the DMR form. In the event no discharge from a point source identified in Provision I.A of this permit and described more fully in the permittee's application occurs during a monitoring period, the permittee shall report "No Discharge" for such period on the appropriate DMR form.
- d. All reports and forms required to be submitted by this permit, the AWPCA and the Department's Rules and regulations, shall be electronically signed (or, if allowed by the Department, traditionally signed) by a "responsible official" of the permittee as defined in ADEM Administrative Code Rule 335-6-6-.09 or a "duly authorized representative" of such official as defined in ADEM Administrative Code Rule 335-6-6-.09 and shall bear the following certification:
- "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."**
- e. The Permittee may certify in writing that a discharge will not occur for an extended period of time and after such certification shall not be required to submit monitoring reports. Written notification of a planned resumption of discharge shall be submitted at least 30 days prior to resumption of the discharge. If an unplanned resumption of

discharge occurs, written notification shall be submitted within 7 days of the resumption. In any case, all discharges shall comply with all provisions of this permit.

- f. All reports and forms required to be submitted by this permit, the AWPCA and the Department's Rules, shall be addressed to:

**Alabama Department of Environmental Management
Municipal Section, Water Division
Post Office Box 301463
Montgomery, Alabama 36130-1463**

Certified and Registered Mail shall be addressed to:

**Alabama Department of Environmental Management
Municipal Section, Water Division
1400 Coliseum Boulevard
Montgomery, Alabama 36110-2059**

DMRs required to be submitted by this permit shall be addressed to:

**Alabama Department of Environmental Management
Environmental Data Section, Permits & Services Division
Post Office Box 301463
Montgomery, Alabama 36130-1463**

- g. If this permit is a reissuance, then the permittee shall continue to submit DMRs in accordance with the requirements of their previous permit until such time as DMRs are due as discussed in Part I.C.1.b. above.

2. Noncompliance Notification

- a. The Permittee must notify the Department if, for any reason, the Permittee's discharge:

- (1) Does not comply with any daily minimum or maximum discharge limitation for an effluent characteristic specified in Provision I. A. of this permit which is denoted by an "(X)"
- (2) Potentially threatens human health or welfare,
- (3) Threatens fish or aquatic life
- (4) Causes an in-stream water quality criterion to be exceeded;
- (5) Does not comply with an applicable toxic pollutant effluent standard or prohibition established under Section 307(a) of the FWPCA, 33 U.S.C. Section 1317(a);
- (6) Contains a quantity of a hazardous substance that may be harmful to public health or welfare under Section 311(b)(4) of the FWPCA, 33 U.S.C. Section 1321(b)(4);
- (7) Exceeds any discharge limitation for an effluent parameter listed in Part I.A as a result of an unanticipated bypass or upset; or
- (8) Is an unpermitted direct or indirect discharge of a pollutant to a water of the state (Note that unpermitted discharges properly reported to the Department under any other requirement are not required to be reported under this provision)

The Permittee shall orally or electronically report any of the above occurrences, describing the circumstances and potential effects, to the Department within 24-hours after the Permittee becomes aware of the occurrence of such discharge. In addition to the oral or electronic report, the Permittee shall submit a written report to the Director or Designee, as provided in Provision I.C.2.c, no later than five days after becoming aware of the occurrence of such discharge or occurrence.

- b. If for any reason, the Permittee's discharge does not comply with any limitation of this permit, then the Permittee must submit a written report to the Director or Designee, as provided in Provision I.C.2.c below. This report must be submitted with the next Discharge Monitoring Report required to be submitted by Provision I.C.1 of this permit after becoming aware of the occurrence of such noncompliance.
- c. Form 42I must be submitted to the Director or Designee in accordance with Provisions I.C.2.a. or b. The completed form must document the following information:
- (1) A description of the discharge and cause of noncompliance;
 - (2) The period of noncompliance, including exact dates, times, and duration of the noncompliance. If not corrected by the due date of the written report, then the Permittee is to state the anticipated timeframe that is expected to transpire before the noncompliance is resolved; and

- (3) A description of the steps taken by the Permittee and the steps planned to be taken by the Permittee to reduce or eliminate the noncompliant discharge, including all steps taken to prevent recurrence.
- d. Immediate notification

The permittee shall provide notification to the Director, the public, the county health department, and any other affected entity such as public water systems, as soon as possible upon becoming aware of any notifiable sanitary sewer overflow. The Permittee shall also report notification of the noncompliance event to any other affected entity such as the public.
- e. The Permittee shall keep an updated record of all known wastewater discharge points that are not authorized as permitted outfalls, including but not limited to SSOs. The Permittee shall submit annual Municipal Water Pollution Prevention Plan (MWPP) reports to the Department each year by May 31st for the prior calendar year period beginning January 1st and ending December 31st. The Annual MWPP Reports shall contain a list of all known wastewater discharge points that are not authorized as permitted outfalls and any discharges that occur prior to the headworks of the wastewater treatment plant covered by this permit. The MWPP shall also provide a list of any discharges reported in accordance with Provision I.C.2.a. The Permittee shall submit with its Annual MWPP Report the following information for each known unpermitted discharge that occurs:
 - (1) The cause of the discharge;
 - (2) Date, duration and volume of discharge (estimate if unknown);
 - (3) Description of the source (e.g., manhole, lift station);
 - (4) Location of the discharge, by street address or any other appropriate method;
 - (5) The ultimate destination of the flow (e.g., surface waterbody, municipal separate storm sewer to surface waterbody). Location should be shown on a USGS quad sheet or copy thereof; and
 - (6) Corrective actions or plans to eliminate future discharges.
- f. The Permittee shall report SSO and other illicit or anomalous discharge events on Form 415 in accordance with Part I.C.2.a. This form is available on the ADEM web page or upon request from the Permittee.

D. OTHER REPORTING AND NOTIFICATION REQUIREMENTS

1. Anticipated Noncompliance

The Permittee shall give the Director written advance notice of any planned changes or other circumstances regarding a facility which may result in noncompliance with permit requirements.

2. Termination of Discharge

The Permittee shall notify the Director, in writing, when all discharges from any point source(s) identified in Provision I. A. of this permit have permanently ceased. This notification shall serve as sufficient cause for instituting procedures for modification or termination of the permit.

3. Updating Information

- a. The Permittee shall inform the Director of any change in the Permittee's mailing address or telephone number or in the Permittee's designation of a facility contact or office having the authority and responsibility to prevent and abate violations of the AWPCA, the Department's Rules and the terms and conditions of this permit, in writing, no later than ten (10) days after such change. Upon request of the Director or his designee, the Permittee shall furnish the Director with an update of any information provided in the permit application.
- b. If the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information with a written explanation for the mistake and/or omission.

4. Duty to Provide Information

The Permittee shall furnish to the Director, within a reasonable time, any information which the Director or his designee may request to determine whether cause exists for modifying, revoking and re-issuing, suspending, or terminating this permit, in whole or in part, or to determine compliance with this permit.

E. SCHEDULE OF COMPLIANCE

1. Compliance with discharge limits

The Permittee shall achieve compliance with the discharge limitations specified in Provision I. A. in accordance with the following schedule:

COMPLIANCE SHALL BE ATTAINED ON THE EFFECTIVE DATE OF THIS PERMIT

2. Schedule

No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

PART II OTHER REQUIREMENTS, RESPONSIBILITIES, AND DUTIES

A. OPERATIONAL AND MANAGEMENT REQUIREMENTS

1. Facilities Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities only when necessary to achieve compliance with the conditions of the permit.

2. Best Management Practices (BMP)

- a. Dilution water shall not be added to achieve compliance with discharge limitations except when the Director or his designee has granted prior written authorization for dilution to meet water quality requirements.
- b. The Permittee shall prepare, implement, and maintain a Spill Prevention, Control and Countermeasures (SPCC) Plan in accordance with 40 C.F.R. Section 112 if required thereby.
- c. The Permittee shall prepare, submit for approval and implement a BMP Plan for containment of any or all process liquids or solids, in a manner such that these materials do not present a significant potential for discharge, if so required by the Director or his designee. When submitted and approved, the BMP Plan shall become a part of this permit and all requirements of the BMP Plan shall become requirements of this permit.

3. Certified Operator

The Permittee shall not operate any wastewater treatment plant unless the competency of the operator to operate such plant has been duly certified by the Director pursuant to AWPCA, and meets the requirements specified in ADEM Administrative Code, Rule 335-10-1.

B. OTHER RESPONSIBILITIES

1. Duty to Mitigate Adverse Impacts

The Permittee shall promptly take all reasonable steps to mitigate and minimize or prevent any adverse impact on human health or the environment resulting from noncompliance with any discharge limitation specified in Provision I. A. of this permit, including such accelerated or additional monitoring of the discharge and/or the receiving waterbody as necessary to determine the nature and impact of the noncomplying discharge.

2. Right of Entry and Inspection

The Permittee shall allow the Director, or an authorized representative, upon the presentation of proper credentials and other documents as may be required by law to:

- (1) Enter upon the Permittee's premises where a regulated facility or activity or point source is located or conducted, or where records must be kept under the conditions of the permit;
- (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permits;
- (3) Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the permit; and
- (4) Sample or monitor, for the purposes of assuring permit compliance or as otherwise authorized by the AWPCA, any substances or parameters at any location.

C. BYPASS AND UPSET

1. Bypass

- a. Any bypass is prohibited except as provided in b. and c. below:
- b. A bypass is not prohibited if:
 - (1) It does not cause any discharge limitation specified in Provision I. A. of this permit to be exceeded;
 - (2) It enters the same receiving stream as the permitted outfall; and
 - (3) It is necessary for essential maintenance of a treatment or control facility or system to assure efficient operation of such facility or system.
- c. A bypass is not prohibited and need not meet the discharge limitations specified in Provision I. A. of this permit if:
 - (1) It is unavoidable to prevent loss of life, personal injury, or severe property damage;

- (2) There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime (this condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance); and
 - (3) The Permittee submits a written request for authorization to bypass to the Director at least ten (10) days prior to the anticipated bypass (if possible), the Permittee is granted such authorization, and the Permittee complies with any conditions imposed by the Director to minimize any adverse impact on human health or the environment resulting from the bypass.
 - d. The Permittee has the burden of establishing that each of the conditions of Provision II. C. 1. b. or c. have been met to qualify for an exception to the general prohibition against bypassing contained in a. and an exemption, where applicable, from the discharge limitations specified in Provision I. A. of this permit.
2. Upset
- a. A discharge which results from an upset need not meet the discharge limitations specified in Provision I. A. of this permit if:
 - (1) No later than 24-hours after becoming aware of the occurrence of the upset, the Permittee orally reports the occurrence and circumstances of the upset to the Director or his designee; and
 - (2) No later than five (5) days after becoming aware of the occurrence of the upset, the Permittee furnishes the Director with evidence, including properly signed, contemporaneous operating logs, or other relevant evidence, demonstrating that:
 - (i) An upset occurred;
 - (ii) The Permittee can identify the specific cause(s) of the upset;
 - (iii) The Permittee's facility was being properly operated at the time of the upset; and
 - (iv) The Permittee promptly took all reasonable steps to minimize any adverse impact on human health or the environment resulting from the upset.
 - b. The Permittee has the burden of establishing that each of the conditions of Provision II C. 2. a. of this permit have been met to qualify for an exemption from the discharge limitations specified in Provision I. A. of this permit.

D. DUTY TO COMPLY WITH PERMIT, RULES, AND STATUTES

- 1. Duty to Comply
 - a. The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the AWPCA and the FWPCA and is grounds for enforcement action, for permit termination, revocation and reissuance, suspension, modification, or denial of a permit renewal application.
 - b. The necessity to halt or reduce production or other activities in order to maintain compliance with the conditions of the permit shall not be a defense for a Permittee in an enforcement action.
 - c. The discharge of a pollutant from a source not specifically identified in the permit application for this permit and not specifically included in the description of an outfall in this permit is not authorized and shall constitute noncompliance with this permit.
 - d. The Permittee shall take all reasonable steps, including cessation of production or other activities, to minimize or prevent any violation of this permit or to minimize or prevent any adverse impact of any permit violation.
 - e. Nothing in this permit shall be construed to preclude or negate the Permittee's responsibility to apply for, obtain, or comply with other Federal, State, or Local Government permits, certifications, or licenses or to preclude from obtaining other federal, state, or local approvals, including those applicable to other ADEM programs and regulations.
- 2. Removed Substances

Solids, sludges, filter backwash, or any other pollutant or other waste removed in the course of treatment or control of wastewaters shall be disposed of in a manner that complies with all applicable Department Rules.
- 3. Loss or Failure of Treatment Facilities

Upon the loss or failure of any treatment facilities, including but not limited to the loss or failure of the primary source of power of the treatment facility, the Permittee shall, where necessary to maintain compliance with the discharge limitations specified in Provision I. A. of this permit, or any other terms or conditions of this permit, cease, reduce, or otherwise control production and/or all discharges until treatment is restored. If control of discharge during loss or failure of the

primary source of power is to be accomplished by means of alternate power sources, standby generators, or retention of inadequately treated effluent, the Permittee must furnish to the Director within six months a certification that such control mechanisms have been installed.

4. Compliance With Statutes and Rules

- a. This permit has been issued under ADEM Administrative Code, Chapter 335-6-6. All provisions of this chapter, that are applicable to this permit, are hereby made a part of this permit. A copy of this chapter may be obtained for a small charge from the Office of General Counsel, Alabama Department of Environmental Management, 1400 Coliseum Boulevard Montgomery, Alabama 36110-2059.
- b. This permit does not authorize the noncompliance with or violation of any Laws of the State of Alabama or the United States of America or any regulations or rules implementing such laws. FWPCA, 33 U.S.C. Section 1319, and Code of Alabama 1975, Section 22-22-14.

E. PERMIT TRANSFER, MODIFICATION, SUSPENSION, REVOCATION, AND REISSUANCE

1. Duty to Reapply or Notify of Intent to Cease Discharge

- a. If the Permittee intends to continue to discharge beyond the expiration date of this permit, the Permittee shall file a complete permit application for reissuance of this permit at least 180 days prior to its expiration. If the Permittee does not intend to continue discharge beyond the expiration of this permit, the Permittee shall submit written notification of this intent which shall be signed by an individual meeting the signatory requirements for a permit application as set forth in ADEM Administrative Code Rule 335-6-6-.09.
- b. Failure of the Permittee to apply for reissuance at least 180 days prior to permit expiration will void the automatic continuation of the expiring permit provided by ADEM Administrative Code Rule 335-6-6-.06 and should the permit not be reissued for any reason any discharge after expiration of this permit will be an unpermitted discharge.

2. Change in Discharge

Prior to any facility expansion, process modification or any significant change in the method of operation of the Permittee's treatment works, the Permittee shall provide the Director with information concerning the planned expansion, modification or change. The Permittee shall apply for a permit modification at least 180 days prior to any facility expansion, process modification, any significant change in the method of operation of the Permittee's treatment works or other actions that could result in the discharge of additional pollutants or increase the quantity of a discharged pollutant or could result in an additional discharge point. This condition applies to pollutants that are or that are not subject to discharge limitations in this permit. No new or increased discharge may begin until the Director has authorized it by issuance of a permit modification or a reissued permit.

3. Transfer of Permit

This permit may not be transferred or the name of the Permittee changed without notice to the Director and subsequent modification or revocation and reissuance of the permit to identify the new Permittee and to incorporate any other changes as may be required under the FWPCA or AWPCA. In the case of a change in name, ownership or control of the Permittee's premises only, a request for permit modification in a format acceptable to the Director is required at least 30 days prior to the change. In the case of a change in name, ownership or control of the Permittee's premises accompanied by a change or proposed change in effluent characteristics, a complete permit application is required to be submitted to the Director at least 180 days prior to the change. Whenever the Director is notified of a change in name, ownership or control, he may decide not to modify the existing permit and require the submission of a new permit application.

4. Permit Modification and Revocation

- a. This permit may be modified or revoked and reissued, in whole or in part, during its term for cause, including but not limited to, the following:
 - (1) If cause for termination under Provision II. E. 5. of this permit exists, the Director may choose to revoke and reissue this permit instead of terminating the permit;
 - (2) If a request to transfer this permit has been received, the Director may decide to revoke and reissue or to modify the permit; or
 - (3) If modification or revocation and reissuance is requested by the Permittee and cause exists, the Director may grant the request.
- b. This permit may be modified during its term for cause, including but not limited to, the following:
 - (1) If cause for termination under Provision II. E. 5. of this permit exists, the Director may choose to modify this permit instead of terminating this permit;

- (2) There are material and substantial alterations or additions to the facility or activity generating wastewater which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit;
- (3) The Director has received new information that was not available at the time of permit issuance and that would have justified the application of different permit conditions at the time of issuance;
- (4) A new or revised requirement(s) of any applicable standard or limitation is promulgated under Sections 301(b)(2)(C), (D), (E), and (F), and 307(a)(2) of the FWPCA;
- (5) Errors in calculation of discharge limitations or typographical or clerical errors were made;
- (6) To the extent allowed by ADEM Administrative Code, Rule 335-6-6-.17, when the standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued;
- (7) To the extent allowed by ADEM Administrative Code, Rule 335-6-6-.17, permits may be modified to change compliance schedules;
- (8) To agree with a granted variance under 301(c), 301(g), 301(h), 301(k), or 316(a) of the FWPCA or for fundamentally different factors;
- (9) To incorporate an applicable 307(a) FWPCA toxic effluent standard or prohibition;
- (10) When required by the reopener conditions in this permit;
- (11) When required under 40 CFR 403.8(e) (compliance schedule for development of pretreatment program);
- (12) Upon failure of the state to notify, as required by Section 402(b)(3) of the FWPCA, another state whose waters may be affected by a discharge permitted by this permit;
- (13) When required to correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions; or
- (14) When requested by the Permittee and the Director determines that the modification has cause and will not result in a violation of federal or state law, regulations or rules.

5. Termination

This permit may be terminated during its term for cause, including but not limited to, the following:

- a. Violation of any term or condition of this permit;
- b. The Permittee's misrepresentation or failure to disclose fully all relevant facts in the permit application or during the permit issuance process or the Permittee's misrepresentation of any relevant facts at any time;
- c. Materially false or inaccurate statements or information in the permit application or the permit;
- d. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;
- e. The Permittee's discharge threatens human life or welfare or the maintenance of water quality standards;
- f. Permanent closure of the facility generating the wastewater permitted to be discharged by this permit or permanent cessation of wastewater discharge;
- g. New or revised requirements of any applicable standard or limitation that is promulgated under Sections 301(b)(2)(C), (D), (E), and (F), and 307(a)(2) of the FWPCA that the Director determines cannot be complied with by the Permittee; or
- h. Any other cause allowed by the ADEM Administrative Code, Chapter 335-6-6.

6. Suspension

This permit may be suspended during its term for noncompliance until the Permittee has taken action(s) necessary to achieve compliance.

7. Stay

The filing of a request by the Permittee for modification, suspension or revocation of this permit, in whole or in part, does not stay any permit term or condition.

F. COMPLIANCE WITH TOXIC POLLUTANT STANDARD OR PROHIBITION

If any applicable effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the FWPCA, 33 U.S.C. Section 1317(a), for a toxic pollutant discharged by the Permittee, and such standard or prohibition is more stringent than any discharge limitation on the pollutant specified in Provision I. A. of this permit or controls a pollutant not limited in Provision I. A. of this permit, this permit shall be modified to conform to the toxic pollutant effluent standard or prohibition, and the Permittee shall be notified of such modification. If this permit has not been modified to conform to the toxic pollutant effluent standard or prohibition before the effective date of such standard or prohibition, the Permittee shall attain compliance with the requirements of the standard or prohibition within the time period required by the standard or prohibition and shall continue to comply with the standard or prohibition until this permit is modified or reissued.

G. NOTICE TO DIRECTOR OF INDUSTRIAL USERS

1. The Permittee shall not allow the introduction of wastewater, other than domestic wastewater, from a new direct discharger prior to approval and permitting, if applicable, of the discharge by the Department.
2. The Permittee shall not allow an existing indirect discharger to increase the quantity or change the character of its wastewater, other than domestic wastewater, prior to approval and permitting, if applicable, of the increased discharge by the Department.
3. The Permittee shall report to the Department any adverse impact caused or believed to be caused by an indirect discharger on the treatment process, quality of discharged water, or quality of sludge. Such report shall be submitted within seven days of the Permittee becoming aware of the adverse impacts.

H. PROHIBITIONS

The Permittee shall not allow, and shall take effective enforcement action to prevent and terminate, the introduction of any of the following into its treatment works by industrial users:

1. Pollutants which create a fire or explosion hazard in the treatment works;
2. Pollutants which will cause corrosive structural damage to the treatment works, or dischargers with a pH lower than 5.0 s.u., unless the works are specifically designed to accommodate such discharges;
3. Solid or viscous pollutants in amounts which will cause obstruction of flow in sewers, or other interference with the treatment works;
4. Pollutants, including oxygen demanding pollutants, released in a discharge of such volume or strength as to cause interference in the treatment works;
5. Heat in amounts which will inhibit biological activity in the treatment plant resulting in interference or in such quantities that the temperature of the treatment plant influent exceeds 40°C (104° F) unless the treatment plant is designed to accommodate such heat; and
6. Pollutants in amounts which exceed any applicable pretreatment standard under Section 307 of FWPCA or any approved revisions thereof.

PART III ADDITIONAL REQUIREMENTS, CONDITIONS, AND LIMITATIONS

A. CIVIL AND CRIMINAL LIABILITY

1. Tampering

Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained or performed under the permit shall, upon conviction, be subject to penalties as provided by the AWPCA.

2. False Statements

Any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be subject to penalties as provided by the AWPCA.

3. Permit Enforcement

a. Any NPDES permit issued or reissued by the Department is a permit for the purpose of the AWPCA and the FWPCA, and as such, any terms, conditions, or limitations of the permit are enforceable under state and federal law.

b. Any person required to have a NPDES permit pursuant to ADEM Administrative Code Chapter 335-6-6 and who discharges pollutants without said permit, who violates the conditions of said permit, who discharges pollutants in a manner not authorized by the permit, or who violates applicable orders of the Department or any applicable rule or standard of the Department, is subject to any one or combination of the following enforcement actions under applicable state statutes:

- (1) An administrative order requiring abatement, compliance, mitigation, cessation, clean-up, and/or penalties;
- (2) An action for damages;
- (3) An action for injunctive relief; or
- (4) An action for penalties.

c. If the Permittee is not in compliance with the conditions of an expiring or expired permit the Director may choose to do any or all of the following provided the Permittee has made a timely and complete application for reissuance of the permit:

- (1) Initiate enforcement action based upon the permit which has been continued;
- (2) Issue a notice of intent to deny the permit reissuance. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;
- (3) Reissue the new permit with appropriate conditions; or
- (4) Take other actions authorized by these rules and AWPCA.

4. Relief from Liability

Except as provided in Provision II. C. 1. (Bypass) and Provision II. C. 2. (Upset), nothing in this permit shall be construed to relieve the Permittee of civil or criminal liability under the AWPCA or FWPCA for noncompliance with any term or condition of this permit.

B. OIL AND HAZARDOUS SUBSTANCE LIABILITY

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities or penalties to which the Permittee is or may be subject under Section 311 of the FWPCA, 33 U.S.C. Section 1321.

C. PROPERTY AND OTHER RIGHTS

This permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to persons or property or invasion of other private rights, or any infringement of federal, state, or local laws or regulations, nor does it authorize or approve the construction of any physical structures or facilities or the undertaking of any work in any waters of the state or of the United States.

D. AVAILABILITY OF REPORTS

Except for data determined to be confidential under Code of Alabama 1975, Section 22-22-9(c), all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. Effluent data shall not be considered confidential.

E. EXPIRATION OF PERMITS FOR NEW OR INCREASED DISCHARGES

1. If this permit was issued for a new discharger or new source, this permit shall expire eighteen months after the issuance date if construction of the facility has not begun during the eighteen-month period.
2. If this permit was issued or modified to allow the discharge of increased quantities of pollutants to accommodate the modification of an existing facility and if construction of this modification has not begun during the eighteen month period after issuance of this permit or permit modification, this permit shall be modified to reduce the quantities of pollutants allowed to be discharged to those levels that would have been allowed if the modification of the facility had not been planned.
3. Construction has begun when the owner or operator has:
 - a. Begun, or caused to begin as part of a continuous on-site construction program:
 - (1) Any placement, assembly, or installation of facilities or equipment; or
 - (2) Significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which are necessary for the placement, assembly, or installation of new source facilities or equipment; or
 - b. Entered into a binding contractual obligation for the purpose of placement, assembly, or installation of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this paragraph.
4. Final plans and specifications for a waste treatment facility at a new source or new discharger, or a modification to an existing waste treatment facility must be submitted to and examined by the Department prior to initiating construction of such treatment facility by the Permittee.
5. Upon completion of construction of waste treatment facilities and prior to operation of such facilities, the Permittee shall submit to the Department a certification from a registered professional engineer, licensed to practice in the State of Alabama, that the treatment facilities have been built according to plans and specifications submitted to and examined by the Department.

F. COMPLIANCE WITH WATER QUALITY STANDARDS

1. On the basis of the Permittee's application, plans, or other available information, the Department has determined that compliance with the terms and conditions of this permit should assure compliance with the applicable water quality standards.
2. Compliance with permit terms and conditions notwithstanding, if the Permittee's discharge(s) from point sources identified in Provision I. A. of this permit cause or contribute to a condition in contravention of state water quality standards, the Department may require abatement action to be taken by the Permittee in emergency situations or modify the permit pursuant to the Department's Rules, or both.
3. If the Department determines, on the basis of a notice provided pursuant to this permit or any investigation, inspection or sampling, that a modification of this permit is necessary to assure maintenance of water quality standards or compliance with other provisions of the AWPCA or FWPCA, the Department may require such modification, and, in cases of emergency, the Director may prohibit the discharge until the permit has been modified.

G. GROUNDWATER

Unless specifically authorized under this permit, this permit does not authorize the discharge of pollutants to groundwater. Should a threat of groundwater contamination occur, the Director may require groundwater monitoring to properly assess the degree of the problem, and the Director may require that the Permittee undertake measures to abate any such discharge and/or contamination.

H. DEFINITIONS

1. Average monthly discharge limitation – means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month (zero discharge days shall not be included in the number of "daily discharges" measured and a less than detectable test result shall be treated as a concentration of zero if the most sensitive EPA approved method was used).
2. Average weekly discharge limitation - means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week (zero discharge days shall not be included in the number of "daily discharges" measured and a less than detectable test result shall be treated as a concentration of zero if the most sensitive EPA approved method was used).

3. Arithmetic Mean – means the summation of the individual values of any set of values divided by the number of individual values.
4. AWPCA – means the Alabama Water Pollution Control Act.
5. BOD – means the five-day measure of the pollutant parameter biochemical oxygen demand.
6. Bypass – means the intentional diversion of waste streams from any portion of a treatment facility.
7. CBOD – means the five-day measure of the pollutant parameter carbonaceous biochemical oxygen demand.
8. Daily discharge – means the discharge of a pollutant measured during any consecutive 24-hour period in accordance with the sample type and analytical methodology specified by the discharge permit.
9. Daily maximum – means the highest value of any individual sample result obtained during a day.
10. Daily minimum – means the lowest value of any individual sample result obtained during a day.
11. Day – means any consecutive 24-hour period.
12. Department – means the Alabama Department of Environmental Management.
13. Director – means the Director of the Department.
14. Discharge – means "[t]he addition, introduction, leaking, spilling or emitting of any sewage, industrial waste, pollutant or other waste into waters of the state". Code of Alabama 1975, Section 22-22-1(b)(9).
15. Discharge Monitoring Report (DMR) – means the form approved by the Director to accomplish reporting requirements of an NPDES permit.
16. DO – means dissolved oxygen.
17. 8HC – means 8-hour composite sample, including any of the following:
 - a. The mixing of at least 8 equal volume samples collected at constant time intervals of not more than 1 hour over a period of not less than 8 hours between the hours of 6:00 a.m. and 6:00 p.m. If the sampling period exceeds 8 hours, sampling may be conducted beyond the 6:00 a.m. to 6:00 p.m. period.
 - b. A sample continuously collected at a constant rate over period of not less than 8 hours between the hours of 6:00 a.m. and 6:00 p.m. If the sampling period exceeds 8 hours, sampling may be conducted beyond the 6:00 a.m. to 6:00 p.m. period.
18. EPA – means the United States Environmental Protection Agency.
19. FC – means the pollutant parameter fecal coliform.
20. Flow – means the total volume of discharge in a 24-hour period.
21. FWPCA – means the Federal Water Pollution Control Act.
22. Geometric Mean – means the Nth root of the product of the individual values of any set of values where N is equal to the number of individual values. The geometric mean is equivalent to the antilog of the arithmetic mean of the logarithms of the individual values. For purposes of calculating the geometric mean, values of zero (0) shall be considered one (1).
23. Grab Sample – means a single influent or effluent portion which is not a composite sample. The sample(s) shall be collected at the period(s) most representative of the discharge.
24. Indirect Discharger – means a nondomestic discharger who discharges pollutants to a publicly owned treatment works or a privately owned treatment facility operated by another person.
25. Industrial User – means those industries identified in the Standard Industrial Classification manual, Bureau of the Budget 1967, as amended and supplemented, under the category "Division D – Manufacturing" and such other classes of significant waste producers as, by regulation, the Director deems appropriate.
26. MGD – means million gallons per day.
27. Monthly Average – means the arithmetic mean of all the composite or grab samples taken for the daily discharges collected in one month period. The monthly average for flow is the arithmetic mean of all flow measurements taken in a one month period.
28. New Discharger – means a person, owning or operating any building, structure, facility or installation:
 - a. From which there is or may be a discharge of pollutants;
 - b. From which the discharge of pollutants did not commence prior to August 13, 1979, and which is not a new source; and

- c. Which has never received a final effective NPDES permit for dischargers at that site.
- 29. NH₃-N – means the pollutant parameter ammonia, measured as nitrogen.
- 30. Notifiable sanitary sewer overflow – means an overflow, spill, release or diversion of wastewater from a sanitary sewer system that:
 - a. Reaches a surface water of the State; or
 - b. May imminently and substantially endanger human health based on potential for public exposure including but not limited to close proximity to public or private water supply wells or in areas where human contact would be likely to occur.
- 31. Permit application – means forms and additional information that is required by ADEM Administrative Code Rule 335-6-08 and applicable permit fees.
- 32. Point source – means "any discernible, confined and discrete conveyance, including but not limited to any pipe, channel, ditch, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, . . . from which pollutants are or may be discharged." Section 502(14) of the FWPCA, 33 U.S.C. Section 1362(14).
- 33. Pollutant – includes for purposes of this permit, but is not limited to, those pollutants specified in Code of Alabama 1975, Section 22-22-1(b)(3) and those effluent characteristics specified in Provision I. A. of this permit.
- 34. Privately Owned Treatment Works – means any devices or system which is used to treat wastes from any facility whose operator is not the operator of the treatment works, and which is not a "POTW".
- 35. Publicly Owned Treatment Works – means a wastewater collection and treatment facility owned by the State, municipality, regional entity composed of two or more municipalities, or another entity created by the State or local authority for the purpose of collecting and treating municipal wastewater.
- 36. Receiving Stream – means the "waters" receiving a "discharge" from a "point source".
- 37. Severe property damage – means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- 38. Significant Source – means a source which discharges 0.025 MGD or more to a POTW or greater than five percent of the treatment work's capacity, or a source which is a primary industry as defined by the U.S. EPA or which discharges a priority or toxic pollutant.
- 39. TKN – means the pollutant parameter Total Kjeldahl Nitrogen.
- 40. TON – means the pollutant parameter Total Organic Nitrogen.
- 41. TRC – means Total Residual Chlorine.
- 42. TSS – means the pollutant parameter Total Suspended Solids.
- 43. 24HC – means 24-hour composite sample, including any of the following:
 - a. The mixing of at least 8 equal volume samples collected at constant time intervals of not more than 2 hours over a period of 24 hours;
 - b. A sample collected over a consecutive 24-hour period using an automatic sampler composite to one sample. As a minimum, samples shall be collected hourly and each shall be no more than one twenty-fourth (1/24) of the total sample volume collected; or
 - c. A sample collected over a consecutive 24-hour period using an automatic composite sampler composited proportional to flow.
- 44. Upset – means an exceptional incident in which there is an unintentional and temporary noncompliance with technology-based permit discharge limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- 45. Waters – means "[a]ll waters of any river, stream, watercourse, pond, lake, coastal, ground, or surface water, wholly or partially within the state, natural or artificial. This does not include waters which are entirely confined and retained completely upon the property of a single individual, partnership, or corporation unless such waters are used in interstate commerce." Code of Alabama 1975, Section 22-22-1(b)(2). Waters "include all navigable waters" as defined in Section 502(7) of the FWPCA, 22 U.S.C. Section 1362(7), which are within the State of Alabama.
- 46. Week – means the period beginning at twelve midnight Saturday and ending at twelve midnight the following Saturday.

47. Weekly (7-day and calendar week) Average – is the arithmetic mean of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. The calendar week is defined as beginning on Sunday and ending on Saturday. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If a calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for the calendar week shall be included in the data for the month that contains the Saturday.

I. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

PART IV SPECIFIC REQUIREMENTS, CONDITIONS, AND LIMITATIONS

A. SLUDGE MANAGEMENT PRACTICES

1. Applicability
 - a. Provisions of Provision IV.A. apply to a sewage sludge generated or treated in treatment works that is applied to agricultural and non-agricultural land, or that is otherwise distributed, marketed, incinerated, or disposed in landfills or surface disposal sites.
 - b. Provisions of Provision IV.A. do not apply to:
 - (1) Sewage sludge generated or treated in a privately owned treatment works operated in conjunction with industrial manufacturing and processing facilities and which receive no domestic wastewater.
 - (2) Sewage sludge that is stored in surface impoundments located at the treatment works prior to ultimate disposal.
2. Submitting Information
 - a. If applicable, the Permittee must submit annually with its Municipal Water Pollution Prevention (MWPP) report the following:
 - (1) Type of sludge stabilization/digestion method;
 - (2) Daily or annual sludge production (dry weight basis);
 - (3) Ultimate sludge disposal practice(s).
 - b. The Permittee shall provide sludge inventory data to the Director as requested. These data may include, but are not limited to, sludge quantity and quality reported in Provision IV.A.2.a as well as other specific analyses required to comply with State and Federal laws regarding solid and hazardous waste disposal.
 - c. The Permittee shall give prior notice to the Director of at least 30 days of any change planned in the Permittee's sludge disposal practices.
3. Reopener or Modification
 - a. Upon review of information provided by the Permittee as required by Provision IV.A.2. or, based on the results of an on-site inspection, the permit shall be subject to modification to incorporate appropriate requirements.
 - b. If an applicable "acceptable management practice" or if a numerical limitation for a pollutant in sewage sludge promulgated under Section 405 of FWPCA is more stringent than the sludge pollutant limit or acceptable management practice in this permit. This permit shall be modified or revoked or reissued to conform to requirements promulgated under Section 405. The Permittee shall comply with the limitations no later than the compliance deadline specified in applicable regulations as required by Section 405 of FWPCA.

B. EFFLUENT TOXICITY LIMITATIONS AND BIOMONITORING REQUIREMENTS – ACUTE DIFFUSER

1. Acute Toxicity Test
 - a. The permittee shall perform 48-hour acute toxicity tests on the wastewater discharges required to be tested for acute toxicity by Part I of this permit.
 - b. The samples shall be diluted using an appropriate control water, to the Instream Waste Concentration (IWC) which is **7 percent** effluent. The IWC is the actual concentration of effluent, after mixing, in the receiving stream during a 1-day, 10-year flow period.
 - c. Any test where survival in the effluent concentration is less than 90% and statistically lower than the control indicates acute toxicity and constitutes noncompliance with this permit.
2. General Test Requirements:
 - a. A 24-hour composite sample shall be obtained for use in above biomonitoring tests. The holding time for each sample shall not exceed 36 hours. The control water shall be a water prepared in the laboratory in accordance with the EPA procedure described in EPA 821-R-02-012 or most current edition or another control water selected by the permittee and approved by the Department.
 - b. Effluent toxicity tests in which the control survival is less than 90% or in which the other requirements of the EPA Test Procedure are not met shall be unacceptable and the permittee shall rerun the tests as soon as practical within the monitoring period.
 - c. In the event of an invalid test, upon subsequent completion of a valid test, the results of all tests, valid and invalid, are reported with an explanation of the tests performed and results.

- d. Toxicity tests shall be conducted for the duration of this permit in the month of **October**. Should results from the Annual Toxicity test indicate that Outfall 0011 exhibits acute toxicity, then the Permittee must conduct the follow-up testing described in Part IV.B.4.a. In addition, the Permittee may then also be required to conduct toxicity testing in the months of March, June, September, and December.
3. Reporting Requirements:
 - a. The permittee shall notify the Department in writing within 48 hours after toxicity has been demonstrated by the scheduled test(s).
 - b. Biomonitoring test results obtained during each monitoring period shall be summarized and reported using the appropriate Discharge Monitoring Report (DMR) form approved by the Department. In accordance with Section 2 of this part, an effluent toxicity report containing the information in Section 2 and 7 shall be included with the DMR. Two copies of the test results must be submitted to the Department no later than 28 days after the month in which the tests were performed.
4. Additional Testing Requirements:
 - a. If acute toxicity is indicated (noncompliance with permit limit), the permittee shall perform four additional valid acute toxicity tests in accordance with these procedures to determine the extent and duration of the toxic condition. The toxicity tests shall be performed once per week and shall be performed during the first four calendar weeks following the date on which the permittee became aware of the permit noncompliance and the results of these tests shall be submitted no later than 28 days following the month in which the tests were performed.
 - b. After evaluation of the results of the follow-up tests, the Department will determine if additional action is appropriate and may require additional testing and/or toxicity reduction measures. The permittee may be required to perform a Toxicity Identification Evaluation (TIE) and/or a Toxicity Reduction Evaluation (TRE). The TIE/TRE shall be performed in accordance with the most recent protocols/guidance outlined by EPA (e.g., EPA/600/2-88/062, EPA/600/R-92/080, EPA/600/R-92/081, EPA/833/B-99/022 and/or EPA/600/6-91/005F, etc.).
5. Test Methods:

The tests shall be performed in accordance with the latest edition of the "EPA Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms" and shall be performed using the fathead minnow (*Pimephales promelas*) and the cladoceran (*Ceriodaphnia dubia*).
6. Effluent Toxicity Testing Reports

The following information shall be submitted with each discharge monitoring report unless otherwise directed by the Department. The Department may at any time suspend or reinstate this requirement or may increase or decrease the frequency of submittals.

 - a. Introduction
 - (1) Facility Name, location and county
 - (2) Permit number
 - (3) Toxicity testing requirements of permit
 - (4) Name of receiving water body
 - (5) Contract laboratory information (if tests are performed under contract)
 - (a) Name of firm
 - (b) Telephone number
 - (c) Address
 - (6) Objective of test
 - b. Plant Operations
 - (1) Discharge operating schedule (if other than continuous)
 - (2) Volume of discharge during sample collection to include Mean daily discharge on sample collection date (MGD, CFS, GPM)
 - (3) Design flow of treatment facility at time of sampling
 - c. Source of Effluent and Dilution Water
 - (1) Effluent samples
 - (a) Sampling point
 - (b) Sample collection dates and times (to include composite sample start and finish times)
 - (c) Sample collection method
 - (d) Physical and chemical data of undiluted effluent samples (water temperature, pH, alkalinity, hardness, specific conductance, total residual chlorine (if applicable), etc.)
 - (e) Sample temperature when received at the laboratory

- (f) Lapsed time from sample collection to delivery
- (g) Lapsed time from sample collection to test initiation
- (2) Dilution Water Samples
 - (a) Source
 - (b) Collection date(s) and time(s) (where applicable)
 - (c) Pretreatment
 - (d) Physical and chemical characteristics (pH, hardness, water temperature, alkalinity, specific conductance, etc.)
- d. Test Conditions
 - (1) Toxicity test method utilized
 - (2) End point(s) of test
 - (3) Deviations from referenced method, if any, and reason(s)
 - (4) Date and time test started
 - (5) Date and time test terminated
 - (6) Type and volume of test chambers
 - (7) Volume of solution per chamber
 - (8) Number of organisms per test chamber
 - (9) Number of replicate test chambers per treatment
 - (10) Test temperature, pH and dissolved oxygen as recommended by the method (to include ranges)
 - (11) Feeding frequency, and amount and type of food
 - (12) Light intensity (mean)
- e. Test Organisms
 - (1) Scientific name
 - (2) Life stage and age
 - (3) Source
 - (4) Disease treatment (if applicable)
- f. Quality Assurance
 - (1) Reference toxicant utilized and source
 - (2) Date and time of most recent acute reference toxicant test(s), raw data, and current cusum chart(s)
 - (3) Dilution water utilized in reference toxicant test
 - (4) Results of reference toxicant test(s) (LC50, etc.), report concentration-response relationship and evaluate test sensitivity. The most recent reference toxicant test shall be conducted within 30-days of the routine.
 - (5) Physical and chemical methods utilized
- g. Results
 - (1) Provide raw toxicity data in tabular form, including daily records of affected organisms in each concentration (including controls) and replicate
 - (2) Provide table of endpoints: LC50, NOEC, Pass/Fail (as required in the applicable NPDES permit)
 - (3) Indicate statistical methods used to calculate endpoints
 - (4) Provide all physical and chemical data required by method
 - (5) Results of test(s) (LC50, NOEC, Pass/Fail, etc.), report concentration-response relationship (definitive test only), report percent minimum significant difference (PMSD).
- h. Conclusions and Recommendations
 - (1) Relationship between test endpoints and permit limits
 - (2) Action to be taken

1/ Adapted from "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms", Fifth Edition, October 2002 (EPA 821-R-02-012), Section 12, Report Preparation

C. TOTAL RESIDUAL CHLORINE (TRC) REQUIREMENTS

1. If chlorine is not utilized for disinfection purposes, TRC monitoring under Part I of this Permit is not required. If TRC monitoring is not required, "NODI = 9" (conditional monitoring) should be reported on the DMR forms.
2. Testing for TRC shall be conducted according to either the amperometric titration method or the DPD colorimetric method as specified in Section 408(C) or (E), Standards Methods for the Examination of Water and Wastewater, 18th edition. If chlorine is not detected prior to actual discharge to the receiving stream using one of these methods (i.e., the analytical result is less than the detection level), the Permittee shall report on the DMR form "NODI = B" or "0". The Permittee shall then be considered to be in compliance with the daily maximum concentration limit for TRC.

3. This permit contains a maximum allowable TRC level in the effluent. The Permittee is responsible for determining the minimum TRC level needed in the chlorine contact chamber to comply with E.coli limits. The effluent shall be dechlorinated if necessary to meet the maximum allowable effluent TRC level.
4. The sample collection point for effluent TRC shall be at a point downstream of the chlorine contact chamber (downstream of dechlorination if applicable). The exact location is to be approved by the Director.

D. PLANT CLASSIFICATION

The Permittee shall report to the Director within 30 days of the effective date of this permit, the name, address and operator number of the certified wastewater operator in responsible charge of the facility. Unless specified elsewhere in this permit, this facility shall be classified in accordance with ADEM Admin. Code R. 335-10-1-.03.

E. POLLUTANT SCANS

The Permittee shall sample and analyze for the pollutants listed in 40 CFR 122 Appendix J Table 2. The Permittee shall provide data from a minimum of three samples collected within the four and one half years prior to submitting a permit application. Samples must be representative of the seasonal variation in the discharge from each outfall.

F. STORM WATER REQUIREMENTS

1. Prohibitions

- a. The Permittee shall not allow the discharge of non-storm water into permitted storm water outfall(s) unless said discharge is already subject to an NPDES permit.
- b. Pollutants removed in the course of treatment or control shall be disposed in a manner that complies with all applicable Department rules and regulations.

2. Operational and Management Practices

The permittee shall prepare and implement a Storm Water Pollution Prevention (SWPP) Plan within one year of the effective date of this permit.

a. In the SWPP Plan, the Permittee shall:

- (1) Assess the treatment plant site by developing and presenting site drainage maps, materials inventory, and best management operational practices. The plan shall also include a description of all spill or leak sources;
- (2) Describe mechanisms and procedures to prevent the contact of sewage sludge, screenings, raw or partially treated wastewater, or any other waste product or pollutant with storm water discharged from the facility;
- (3) Provide for daily inspection on workdays of any structures that function to prevent storm water pollution or that remove pollutants from storm water;
- (4) Provide for daily inspection of the facility in general to ensure that the SWPP Plan is continually implemented and effective;
- (5) Include a Best Management Practices (BMP) Plan that, as a minimum, addresses housekeeping, preventative maintenance, spill prevention and response, and non-storm water discharges;
- (6) Describe mechanisms and procedures to provide sediment control sufficient to prevent or control storm water pollution storm water by particles resulting from soil or sediment migration from the site due to significant clearing, grading, or excavation activities;
- (7) Designate by position or name the person or persons responsible for the day to day implementation of the SWPP Plan; and
- (8) Bear the signature of an individual meeting signatory requirements as defined in ADEM Administrative Code, Rule 335-6-6-.09.

- b. The Director or his designee may notify the permittee at any time that the SWPP Plan is deficient and will require correction of the deficiency. The permittee shall correct any SWPP Plan deficiency identified by the Director or his designee within 30 days of receipt of notification and shall certify to the Department that the correction has been made and implemented.

c. Administrative Procedures

- (1) A copy of the SWPP Plan shall be maintained at the facility and shall be available for inspection by the Department.

- (2) A log of daily inspections required by Provision IV.F.2.a.(3.) of the permit shall be maintained at the facility and shall be made available for inspection by the Department upon request. The log shall contain records of all inspections performed and each daily entry shall be signed by the person performing the inspection.
- (3) The Permittee shall provide training for any personnel required to implement the SWPP Plan and shall retain documentation of such training at the facility. Training records for all personnel shall be available for inspection by the Department. Training shall be performed prior to the date implementation is required.

3. Monitoring Requirements

- a. Storm water discharged through each storm water outfall shall be sampled once per calendar year, using first flush grab samples (FFGS) collected during the first 30 minutes of discharge.
- b. The total volume of storm water discharged for the event must be monitored, including the date and duration (in hours) and rainfall (in inches) for the storm event(s) sampled. The duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event must be a minimum of 72 hours. This information must be recorded as part of the sampling procedure and records retained in accordance with Provision I.B.5. of this permit. The volume may be measured using flow measurement devices or may be estimated using any method approved in writing by the Department.

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
WATER DIVISION – INDUSTRIAL AND MUNICIPAL SECTIONS
NONCOMPLIANCE NOTIFICATION FORM

PERMITTEE NAME: _____ PERMIT NO: _____

FACILITY LOCATION: _____

DMR REPORTING PERIOD: _____

1. DESCRIPTION OF DISCHARGE: (Include outfall number (s))

2. DESCRIPTION OF NON-COMPLIANCE: (Attach additional pages if necessary):

LIST EFFLUENT VIOLATIONS (If applicable)			
Outfall Number (s)	NONCOMPLIANCE PARAMETER(S)	Result Reported (Include units)	Permit Limit (Include units)

LIST MONITORING / REPORTING VIOLATIONS (If applicable)		
Outfall Number (s)	NONCOMPLIANCE PARAMETER(S)	Monitoring / Reporting Violation (Provide description)

3. CAUSE OF NON-COMPLIANCE (Attach additional pages if necessary):

4. PERIOD OF NONCOMPLIANCE: (Include exact date(s) and time(s) or, if not corrected, the anticipated time the noncompliance is expected to continue):

5. DESCRIPTION OF STEPS TAKEN AND/OR BEING TAKEN TO REDUCE OR ELIMINATE THE NONCOMPLYING DISCHARGE AND TO PREVENT ITS RECURRENCE (attach additional pages if necessary):

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

NAME AND TITLE OF RESPONSIBLE OFFICIAL (type or print)

SIGNATURE OF RESPONSIBLE OFFICIAL / DATE SIGNED

FACT SHEET

**APPLICATION FOR
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
PERMIT TO DISCHARGE TREATED WASTEWATERS
TO WATERS OF THE STATE OF ALABAMA**

Date: July 30, 2015

Prepared By:

NPDES Permit No. AL0057193

1. SYNOPSIS OF APPLICATION

a. Name and Address of Applicant and Location if Different From Mailing Address

Applicant Name and Address:

UTILITIES BOARD OF THE CITY OF
GREENSBORO
POST OFFICE BOX 546
GREENSBORO AL 36744

Facility Location:

Greensboro Lagoon
County Road 19
Greensboro, Alabama 36744

b. Description of Applicant's Facility or Activity Generating the Discharge

Municipal Wastewater Treatment Plant

For the Outfall latitude and longitude see the permit application

c. Applicant's Receiving Waters

Receiving Waters

BLACK WARRIOR RIVER
Colwell Creek

Classification

S, F&W,
F&W,

d. Quantitative Description of Proposed Discharges

See attached draft permit and permit application

2. PROPOSED DISCHARGE LIMITATIONS

See attached draft permit

3. STATEMENT OF BASIS FOR PERMIT LIMITATIONS

See attached permit rationale

4. PROCEDURES FOR THE FORMULATION OF FINAL DETERMINATIONS

a. Comment Period

The Alabama Department of Environmental Management proposes to issue an NPDES permit to this applicant subject to the effluent limitations and special conditions outlined above. These determinations are tentative.

Interested persons are invited to submit written comments on the permit application or on proposed determinations to the following address:

Russell A. Kelly, Chief
Permits and Services Division
Alabama Department of Environmental Management
1400 Coliseum Blvd
(Mailing Address: Post Office Box 301463; Zip 36130-1463)
Montgomery, Alabama 36110-2059
(334) 271-7714

All comments received prior to the closure of the public notice period (see attached public notice) will be considered in the formulation of final determinations with regard to this application.

b. Public Hearing

A written request for a public hearing may also be filed with the public notice period and must state the nature of the issues proposed to be raised in the hearing. The Director shall hold a public hearing whenever it is found, on the basis of hearing requests, that there exists a significant degree of public interest in the permit application or draft permit or group of permits. A request for a hearing should be filed with the Department at the following address:

Russell A. Kelly, Chief
Permits and Services Division
Alabama Department of Environmental Management
1400 Coliseum Blvd
(Mailing Address: Post Office Box 301463; Zip 36130-1463)
Montgomery, Alabama 36110-2059
(334) 271-7714

The Director may hold a public hearing if he determines that useful information and data may be obtained thereby. Public notice of such a hearing will be published at least 30 days prior to the hearing in a newspaper having general circulation in the geographical area of the discharge and will be sent to those on the ADEM mailing list at least thirty days prior to the hearing.

c. Issuance of the Permit

Upon the expiration of the comment period and, if applicable, completion of the public hearing process a response to all significant comments will be prepared. After consideration of all comments received during the notice period or as the result of a public hearing, the response to comments, and of the requirements of the Alabama Water Pollution Control Act and appropriate regulations, the Director will make a final decision regarding permit issuance. **The permit record, including the response to comments, will be available to the public and an appointment to review the record may be made by writing the Permits and Services Division at the above address.**

Unless a request for a stay of a permit or permit provision is granted, the proposed permit contained in the Director's determination shall be issued and effective; and will be the final action of the Alabama Department of Environmental Management.

d. Appeal Procedures

Any person adversely affected by the Director's final decision may submit an appeal or a request for a stay of the permit or one or more provisions of the permit. Such requests should be received by the

Environmental Management Commission within thirty days of issuance of the permit. Requests should be submitted to the Chairperson at the following address:

Alabama Environmental Management Commission
1400 Coliseum Blvd
(Mailing Address: Post Office Box 301463; Zip 36130-1463)
Montgomery, Alabama 36110-2059

All requests must:

- (i) State the name, mailing address and telephone number of the person making such request;
- (ii) Identify the interest of the appellant which is affected by the proposed issuance, denial or modification of the permit contained in the determination of the Director, and explain how and to what extent that interest would be directly and adversely affected by such determination;
- (iii) Identify any persons whom the request represents;
- (iv) State with particularity the issues proposed to be considered at the hearing;
- (v) Include any terms and conditions with which the appellant proposes to revise or replace the determinations of the Director;
- (vi) State the name, mailing address and telephone number of the attorney for the person making the request, if represented by an attorney; and
- (vii) An original signature of the person making the request or such person's attorney.

The Commission may rule on the appeal or may hold an appeals hearing prior to making a ruling.

NPDES PERMIT RATIONALE

NPDES Permit No: **AL0057193** Date: May 27, 2015
Revision Date: July 30, 2015

Permit Applicant: Utilities Board of the City of Greensboro
Post Office Box 546
Greensboro, Alabama 36744

Location: Greensboro Lagoon
649 County Road 19
Greensboro, Alabama 36744

Draft Permit is: Initial Issuance:
Reissuance due to expiration: X
Modification of existing permit:
Revocation and Reissuance:

Basis for Limitations: Water Quality Model: CBOD₅, NH₃-N
Reissuance with no modification: pH, TSS, TRC, CBOD₅, NH₃-N, TSS %
Removal, CBOD₅ % Removal
Instream calculation from CORMIX (ZID): 6.34%
Toxicity based: TRC
Secondary Treatment Levels: CBOD₅ % Removal
Other (described below): pH, E. Coli, TSS, TSS % Removal, Total Recoverable
Copper

Design Flow in Million Gallons per Day: 2 MGD

Description of Discharge: Outfall Number 001;
Effluent discharge to Black Warrior River,
which is classified as Swimming/Fish and Wildlife.

Outfall Number 002;
Stormwater discharge to Colwell Creek,
which is classified as Fish and Wildlife .

Outfall Number 003;
Stormwater discharge to Colwell Creek, which is
classified as Fish and Wildlife .

Discussion: This permit is a reissuance due to expiration.

The pH limits for Outfall 0012 were developed consistent with the water-use designation of the receiving stream. The daily maximum pH limit is 9.0 s.u. and the daily minimum is 6.0 s.u. The monitoring frequency will be twice per month. Flow will be monitored continuously, seven days a week.

The monthly average Total Suspended Solids (TSS) limit is established at 90.0 mg/l in accordance with ADEM's Permit Development Rationale and 40 CFR 133.105. A minimum percent removal of 85 percent based on 40 CFR 133.102 is imposed for 5-Day Carbonaceous Biochemical Oxygen Demand

(CBOD₅) and a minimum percent removal of 65 percent based on 40 CFR 133.105 is imposed for TSS. The monitoring frequency will be twice per month for TSS and monthly for CBOD₅ and TSS percent removal.

The discharge limits for CBOD₅ and Ammonia as Nitrogen (NH₃N) for Outfall 0012 were developed by the Municipal Permitting Section based on a Waste Load Allocation (WLA) model performed by the Department's Water Quality Branch on May 13, 2014. CBOD₅ and NH₃N have monthly average limits of 25 mg/l and 20 mg/l, respectively. Dissolved Oxygen (DO) will be in the permit on a monitor only basis. The monitoring frequency will be twice per month.

The Department amended ADEM Administrative Code R.335-6-10-.09 to change the bacterial indicator organisms and associated criteria for non-coastal waters from fecal coliform to *Escherichia coli* (E. coli) to be consistent with the United States Environmental Protection Agency (EPA) recommendations for protection against water-borne illnesses. As a result, this permit includes E. coli limits that are consistent with the revised regulations.

The imposed E. coli limits were determined based on the water-use classification of the receiving stream. Since the Black Warrior River is classified as Swimming and Fish & Wildlife, more stringent limits for the Swimming classification apply. The limits year round are 126 col/100mL (monthly average) and 235 col/100mL (daily maximum). The monitoring frequency will be twice per month.

This permit imposes monthly monitoring for the following nutrient-related parameters: Total Kjeldahl Nitrogen (TKN), Total Phosphorus (TP), and Nitrate plus Nitrite-Nitrogen (NO₂+NO₃-N). Monitoring for these nutrient-related parameters is imposed so that sufficient information will be available regarding the nutrient contribution from this point source, should it be necessary at some later time to impose nutrient limits on this discharge.

The Total Residual Chlorine (TRC) limits are based on calculations to ensure that acute and chronic toxic concentrations of TRC in the receiving stream are not exceeded. The TRC limit is 1.0 mg/L (daily maximum). The monitoring frequency will be twice per month.

Acute toxicity applies because of the low actual IWC after complete mixing. The IWC is 7% based on a CORMIX model run by ADEM's Water Quality Branch on May 20, 2009 because the discharge employs a diffuser. Toxicity testing is required with two species-(Ceriodaphnia and Pimephales) and the permit requires less than 10% mortality, 90% survival. Toxicity testing is required because this is a major facility discharging to a water of the state with a Swimming and Fish and Wildlife water-use classification. The monitoring frequency will be once per year in October.

ADEM completed a Reasonable Potential Analysis (RPA) of the data submitted in Part D of the Permittee's application (Per 40 CFR Part 122 Appendix J – Table 2). The RPA was based on the permit application. The RPA indicates there is a reasonable potential to contribute to excursions of Alabama's in-stream water quality standards in Total Recoverable Copper. The RP is due to one high copper test that the facility stated was likely a lab error. The other copper tests performed by the facility put them well below RP. In order to gather more data, the permit will require semi-annual Total Recoverable Copper monitoring.

The receiving stream is the Black Warrior River, a Tier II waterbody. The stream is not on the current 303(d) list for impaired waterbodies. There are no approved TMDLs for this waterbody.

ADEM Administrative Rule 335-6-10-.12 requires applicants to new or expanded discharges to Tier II waters demonstrate that the proposed discharge is necessary for important economic or social

development in the area in which the waters are located. The application submitted by the facility is not for a new or expanded discharge, so the applicant is not required to demonstrate that the discharge is necessary for economic and social development.

Annual stormwater monitoring will be required at Outfalls 002S and 003S for pH, TSS, NH₃-N, TKN, NO₂+NO₃-N, TP, flow, CBOD₅, Oil and Grease, and E. coli.

Prepared by: Sandra Lee

TOXICITY AND DISINFECTION RATIONALE

Facility Name:	Greensboro Lagoon	
NPDES Permit Number:	AL0057193	
Receiving Stream:	Black Warrior River	
Facility Design Flow (Q _w):	2.000 MGD	
Receiving Stream 7Q ₁₀ :	575.000 cfs	
Receiving Stream 1Q ₁₀ :	472.000 cfs	
Winter Headwater Flow (WHF):	967.00 cfs	
Summer Temperature for CCC:	30 deg. Celsius	
Winter Temperature for CCC:	30 deg. Celsius	
Headwater Background NH ₃ -N Level:	0.11 mg/l	
Receiving Stream pH:	7.0 s.u.	
Headwater Background FC Level (summer):	N/A.	(Only applicable for facilities with diffusers.)
(winter)	N/A.	

The Stream Dilution Ratio (SDR) is calculated using the 7Q₁₀ for all stream classifications.

$$\text{Stream Dilution Ratio (SDR)} = \frac{Q_w}{7Q_{10} + Q_w} = 0.54\%$$

AMMONIA TOXICITY LIMITATIONS

Toxicity-based ammonia limits are calculated in accordance with the *Ammonia Toxicity Protocol* and the *General Guidance for Writing Water Quality Based Toxicity Permits*.

If the Limiting Dilution is less than 1%, the waterbody is considered stream-dominated and the CMC applies.

If the Limiting Dilution is greater than 1%, the waterbody is considered effluent-dominated and the CCC applies.

$$\begin{aligned} \text{Limiting Dilution} &= \frac{Q_w}{7Q_{10} + Q_w} \\ &= 0.54\% \quad \text{Stream-Dominated, CMC Applies} \end{aligned}$$

Criterion Maximum Concentration (CMC):	CMC = $0.411 / (1 + 10^{(7.204 - \text{pH})}) + 58.4 / (1 + 10^{(\text{pH} - 7.204)})$
Criterion Continuous Concentration (CCC):	CCC = $[0.0577 / (1 + 10^{(7.688 - \text{pH})}) + 2.487 / (1 + 10^{(\text{pH} - 7.688)})] * \text{Min}[2.85, 1.45 * 10^{(0.028 * (25 - T))}]$

	<u>CMC</u>	<u>CCC</u>
Allowable Summer Instream NH ₃ -N:	36.09 mg/l	2.18 mg/l
Allowable Winter Instream NH ₃ -N:	36.09 mg/l	2.18 mg/l

$$\begin{aligned} \text{Summer NH}_3\text{-N Toxicity Limit} &= \frac{[(\text{Allowable Instream NH}_3\text{-N}) * (7Q_{10} + Q_w)] - [(\text{Headwater NH}_3\text{-N}) * (7Q_{10})]}{Q_w} \\ &= 6722.3 \text{ mg/l NH}_3\text{-N at 7Q}_{10} \end{aligned}$$

$$\begin{aligned} \text{Winter NH}_3\text{-N Toxicity Limit} &= \frac{[(\text{Allowable Instream NH}_3\text{-N}) * (\text{WHF} + Q_w)] - [(\text{Headwater NH}_3\text{-N}) * (\text{WHF})]}{Q_w} \\ &= \text{N/A.} \end{aligned}$$

The ammonia limits established in the permit will be the lesser of the DO-based ammonia limit (from the wasteload allocation model) or the toxicity limits calculated above.

	<u>DO-based NH₃-N limit</u>	<u>Toxicity-based NH₃-N limit</u>
Summer	20.00 mg/l NH ₃ -N	6722.30 mg/l NH ₃ -N
Winter	N/A.	N/A.

Summer: The DO based limit of 20.00 mg/l NH₃-N applies.

Winter limits are not applicable.

TOXICITY TESTING REQUIREMENTS (REFERENCE: MUNICIPAL BRANCH TOXICITY PERMITTING STRATEGY)

The following factors trigger toxicity testing requirements:

1. Facility design flow is equal to or greater than 1.0 MGD (major facility).
2. There are significant industrial contributors (SID permits).

Acute toxicity testing is specified for A&I receiving streams, or for stream dilution ratios of 1% or less.

Chronic toxicity testing is specified for all other situations requiring toxicity testing.

Acute toxicity testing is required

$$\text{Instream Waste Concentration (IWC)} = \frac{\text{Based on Cormix Model}}{\text{}} = 6.34\% \quad \text{Note: This number will be rounded up for toxicity testing purposes.}$$

DISINFECTION REQUIREMENTS

Bacteria limits are required, and will be the water quality limit for the receiving stream, except where diffusers are used the limit may be adjusted for the dilution provided by the diffuser.

See the attached Disinfection Guidance for applicable stream standards.

(Non-coastal limits apply)

Applicable Stream Classification: **Swimming, Fish & Wildlife**

Disinfection Type: **Chlorination**

Limit calculation method: **Limits based on meeting stream standards at the point of discharge.**

	Stream Standard (colonies/100ml)	Effluent Limit (colonies/100ml)
<u>E. Coli (applies to Non-coastal and Shellfish Harvesting Coastal)</u>		
Monthly limit as monthly average (October through May):	126	126
Monthly limit as monthly average (June through September):	126	126
Daily Max (October through May):	235	235
Daily Max (June through September):	235	235
<u>Enterococci (applies to Coastal)</u>		
Monthly limit as geometric mean (October through May):	Not applicable	Not applicable
Monthly limit as geometric mean (June through September):	Not applicable	Not applicable
Daily Max (October through May):	Not applicable	Not applicable
Daily Max (June through September):	Not applicable	Not applicable

MAXIMUM ALLOWABLE CHLORINATION LIMITS

Toxicity-based chlorine limits are calculated in accordance with the General Guidance for Writing Water Quality Based Toxicity Permits.

Chlorine has been shown to be acutely toxic at 0.019 mg/l and chronically toxic at 0.011 mg/l.

Maximum allowable TRC in effluent:	2.055 mg/l (chronic)	(0.011)/(SDR)
Maximum allowable TRC in effluent:	3.550 mg/l (acute)	(0.019)/(SDR)

NOTE: A maximum chlorine limit will be imposed such that the instream concentration will not exceed acutely toxic concentrations in A & I streams and chronically toxic concentrations in all other streams, but may not exceed 1.0 mg/l.

Prepared By:

Sandra Lee

Date:

10/2/2014

Q ₁ *C _d + Q _{d2} *C _{d2} + Q _s *C _s = Q _r *C _r								Enter Max Daily Discharge as reported by Applicant (C _{dmax})	Enter Avg Daily Discharge as reported by Applicant (C _{davg})	Partition Coefficient (Stream / Lake)
ID	Pollutant	Carcinogen Yes*	Type	Background from upstream source (C _{u1}) Daily Max	Background from upstream source (C _{u2}) Monthly Ave	Background Instream (C _b) Daily Max	Background Instream (C _b) Monthly Ave			
				µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	
1	Antimony		Metals	0	0	0	0	0	0	
2	Arsenic**	YES	Metals	0	0	0	0	0	0	0.574
3	Beryllium		Metals	0	0	0	0	0	0	
4	Cadmium**		Metals	0	0	0	0	0	0	0.236
5	Chromium / Chromium III**		Metals	0	0	0	0	0	0	0.210
6	Chromium / Chromium VI**		Metals	0	0	0	0	0	0	
7	Copper**		Metals	0	0	0	0	3940	1400	0.388
8	Lead**		Metals	0	0	0	0	0	0	0.457
9	Mercury**		Metals	0	0	0	0	0.2	0.1	0.000
10	Nickel**		Metals	0	0	0	0	0	0	0.505
11	Selenium		Metals	0	0	0	0	0	0	
12	Silver		Metals	0	0	0	0	0	0	
13	Thallium		Metals	0	0	0	0	0	0	
14	Zinc**		Metals	0	0	0	0	60	30	0.330
15	Cyanide		Metals	0	0	0	0	0	0	
16	Total Phenolic Compounds		Metals	0	0	0	0	280	90	
17	Hardness (As CaCO3)		Metals	0	0	0	0	48900	48900	
18	Acrolein		VOC	0	0	0	0	0	0	
19	Acrylonitrile*	YES	VOC	0	0	0	0	0	0	
20	Aldrin	YES	VOC	0	0	0	0	0	0	
21	Benzene*	YES	VOC	0	0	0	0	0	0	
22	Bromoform*	YES	VOC	0	0	0	0	0	0	
23	Carbon Tetrachloride*	YES	VOC	0	0	0	0	0	0	
24	Chlordane	YES	VOC	0	0	0	0	0	0	
25	Dibromobenzene		VOC	0	0	0	0	0	0	
26	Dichlorodibromo-Methane*	YES	VOC	0	0	0	0	0	0	
27	Chlorobenzene		VOC	0	0	0	0	0	0	
28	2-Chloro-Ethylvinyl Ether		VOC	0	0	0	0	0	0	
29	ChloroForm*	YES	VOC	0	0	0	0	0	0	
30	4,4'-DDD	YES	VOC	0	0	0	0	0	0	
31	4,4'-DDE	YES	VOC	0	0	0	0	0	0	
32	4,4'-DDT	YES	VOC	0	0	0	0	0	0	
33	Dichlorodibromo-Methane*	YES	VOC	0	0	0	0	0	0	
34	1,1-Dichloroethane		VOC	0	0	0	0	0	0	
35	1,2-Dichloroethane*	YES	VOC	0	0	0	0	0	0	
36	Trans-1, 2-Dichloro-Ethylene		VOC	0	0	0	0	0	0	
37	1,1-Dichloroethylene*	YES	VOC	0	0	0	0	0	0	
38	1,2-Dichloropropane		VOC	0	0	0	0	0	0	
39	1,3-Dichloro-Propylene		VOC	0	0	0	0	0	0	
40	Dieldrin	YES	VOC	0	0	0	0	0	0	
41	Ethylbenzene		VOC	0	0	0	0	0	0	
42	Methyl Bromide		VOC	0	0	0	0	0	0	
43	Methyl Chloride		VOC	0	0	0	0	0	0	
44	Methylene Chloride*	YES	VOC	0	0	0	0	0	0	
45	1, 1, 2, 2-Tetrachloro-Ethane*	YES	VOC	0	0	0	0	0	0	
46	Tetrachloro-Ethylene*	YES	VOC	0	0	0	0	0	0	
47	Toluene		VOC	0	0	0	0	0	0	
48	Toxaphene	YES	VOC	0	0	0	0	0	0	
49	Tributyltin (TBT)	YES	VOC	0	0	0	0	0	0	
50	1, 1, 1-Trichloroethane		VOC	0	0	0	0	0	0	
51	1, 1, 2-Trichloroethane*	YES	VOC	0	0	0	0	0	0	
52	Trichloroethylene*	YES	VOC	0	0	0	0	0	0	
53	Vinyl Chloride*	YES	VOC	0	0	0	0	0	0	
54	p-Chloro-m-Cresol		Acids	0	0	0	0	0	0	
55	2-Chlorophenol		Acids	0	0	0	0	0	0	
56	2,4-Dichlorophenol		Acids	0	0	0	0	0	0	
57	2,4-Dimethylphenol		Acids	0	0	0	0	0	0	
58	4,6-Dinitro-o-Cresol		Acids	0	0	0	0	0	0	
59	2,4-Dinitrophenol		Acids	0	0	0	0	0	0	
60	4,6-Dinitro-2-methylphenol	YES	Acids	0	0	0	0	0	0	
61	Dioxin (2,3,7,8-TCDD)	YES	Acids	0	0	0	0	0	0	
62	2-Nitrophenol		Acids	0	0	0	0	0	0	
63	4-Nitrophenol		Acids	0	0	0	0	0	0	
64	Pentachlorophenol*	YES	Acids	0	0	0	0	0	0	
65	Phenol		Acids	0	0	0	0	0	0	
66	2, 4, 6-Trichlorophenol*	YES	Acids	0	0	0	0	0	0	
67	Acenaphthene		Bases	0	0	0	0	0	0	
68	Acenaphthylene		Bases	0	0	0	0	0	0	
69	Anthracene		Bases	0	0	0	0	0	0	
70	Benidine		Bases	0	0	0	0	0	0	
71	Benzo(A)Anthracene*	YES	Bases	0	0	0	0	0	0	
72	Benzo(A)Pyrene*	YES	Bases	0	0	0	0	0	0	
73	3,4-Benzo-Fluoranthene		Bases	0	0	0	0	0	0	
74	Benzo(GH)Fluorene		Bases	0	0	0	0	0	0	
75	Benzo(K)Fluoranthene		Bases	0	0	0	0	0	0	
76	Bis (2-Chloroethoxy) Methane		Bases	0	0	0	0	0	0	
77	Bis (2-Chloroethoxy) Ether*	YES	Bases	0	0	0	0	0	0	
78	Bis (2-Chloro-Propyl) Ether		Bases	0	0	0	0	0	0	
79	Bis (2-Ethylhexyloxy) Phthalate*	YES	Bases	0	0	0	0	0	0	
80	4-Bromophenyl Phenyl Ether		Bases	0	0	0	0	0	0	
81	Butyl Benzyl Phthalate		Bases	0	0	0	0	0	0	
82	2-Chloronaphthalene		Bases	0	0	0	0	0	0	
83	4-Chlorophenyl Phenyl Ether		Bases	0	0	0	0	0	0	
84	Chrysene*	YES	Bases	0	0	0	0	0	0	
85	Di-N-Butyl Phthalate		Bases	0	0	0	0	0	0	
86	Di-N-Octyl Phthalate		Bases	0	0	0	0	0	0	
87	Dibenz(A,H)Anthracene*	YES	Bases	0	0	0	0	0	0	
88	1,2-Dichlorobenzene		Bases	0	0	0	0	0	0	
89	1,3-Dichlorobenzene		Bases	0	0	0	0	0	0	
90	1,4-Dichlorobenzene		Bases	0	0	0	0	0	0	
91	3,3-Dichlorobenzene*	YES	Bases	0	0	0	0	0	0	
92	Diethyl Phthalate		Bases	0	0	0	0	0	0	
93	Dimethyl Phthalate		Bases	0	0	0	0	0	0	
94	2,4-Dinitrotoluene*	YES	Bases	0	0	0	0	0	0	
95	2,6-Dinitrotoluene		Bases	0	0	0	0	0	0	
96	1,2-Diphenylhydrazine		Bases	0	0	0	0	0	0	
97	Endosulfan (alpha)	YES	Bases	0	0	0	0	0	0	
98	Endosulfan (beta)	YES	Bases	0	0	0	0	0	0	
99	Endosulfan sulfate	YES	Bases	0	0	0	0	0	0	
100	Endrin	YES	Bases	0	0	0	0	0	0	
101	Endrin Aldehyde	YES	Bases	0	0	0	0	0	0	
102	Fluoranthene		Bases	0	0	0	0	0	0	
103	Fluorene		Bases	0	0	0	0	0	0	
104	Heptachlor	YES	Bases	0	0	0	0	0	0	
105	Heptachlor Epoxide	YES	Bases	0	0	0	0	0	0	
106	Hexachlorobenzene*	YES	Bases	0	0	0	0	0	0	
107	Hexachlorobutadiene*	YES	Bases	0	0	0	0	0	0	
108	Hexachlorocyclohexan (alpha)	YES	Bases	0	0	0	0	0	0	
109	Hexachlorocyclohexan (beta)	YES	Bases	0	0	0	0	0	0	
110	Hexachlorocyclohexan (gamma)	YES	Bases	0	0	0	0	0	0	
111	Hexachlorocyclopentadiene		Bases	0	0	0	0	0	0	
112	Hexachloroethane		Bases	0	0	0	0	0	0	
113	Indeno(1,2,3-CK)Pyrene*	YES	Bases	0	0	0	0	0	0	
114	Isophorone		Bases	0	0	0	0	0	0	
115	Naphthalene		Bases	0	0	0	0	0	0	
116	Nitrobenzene		Bases	0	0	0	0	0	0	
117	N-Nitrosodi-N-Propylamine*	YES	Bases	0	0	0	0	0	0	
118	N-Nitrosodi-N-Methylamine*	YES	Bases	0	0	0	0	0	0	
119	N-Nitrosodi-N-Phenylamine*	YES	Bases	0	0	0	0	0	0	
120	PCB-1016	YES	Bases	0	0	0	0	0	0	
121	PCB-1221	YES	Bases	0	0	0	0	0	0	
122	PCB-1232	YES	Bases	0	0	0	0	0	0	
123	PCB-1242	YES	Bases	0	0	0	0	0	0	
124	PCB-1248	YES	Bases	0	0	0	0	0	0	
125	PCB-1254	YES	Bases	0	0	0	0	0	0	
126	PCB-1260	YES	Bases	0	0	0	0	0	0	
127	Phenanthrene		Bases	0	0	0	0	0	0	
128	Pyrene		Bases	0	0	0	0	0	0	
129	1,2,4-Trichlorobenzene		Bases	0	0	0	0	0	0	

2	Enter Q ₁ = wastewater discharge flow from facility (MGD)
3.094458	Q ₁ = wastewater discharge flow (cfs) (this value is calculated from the MGD)
0	Enter or estimated, Q _{d2} = background stream flow from upstream source (cfs)
575	Enter 7Q10, Q _s = background stream flow in cfs above point of discharge
472	Enter or estimated, 1Q10, Q _s = background stream flow in cfs above point of discharge (1Q10 estimated at 75% of 7Q10)
0	Enter flow from upstream discharge Q _{d2} = background stream flow in MGD above point of discharge
10001	Enter Mean Annual Flow, Q _s = background stream flow in cfs above point of discharge
967	Enter 7Q2, Q _s = background stream flow in cfs above point of discharge (For LWF class streams)
Enter to Left	Enter C _b = background in-stream pollutant concentration in µg/l (assuming this is zero "0" unless there is data)
Q ₁ + Q _{d2} - Q _s	Q _s = resultant in-stream flow, after discharge
Calculated on other	C _s = resultant in-stream pollutant concentration in µg/l in the stream (after complete mixing occurs)
50	Enter, Background Hardness above point of discharge (assumed 50 South of Birmingham and 100 North of)
7.00 s.u.	Enter, Background pH above point of discharge
YES	Enter, is discharge to a stream? "YES" Other option would be to a Lake. (This changes the partition coefficients for the metals)

** Using Partition Coefficients

May 27, 2015

Facility Name: Greensboro Lagoon NPDES No. AL0057193														Human Health Consumption Fish only (µg/l)									
Freshwater F&W Classification:				Max Daily Discharge as reported by Applicant (C _{max})		Freshwater Acute (µg/l) C _a = 1Q10				Avg Daily Discharge as reported by Applicant (C _{avg})		Freshwater Chronic (µg/l) C _c = 7Q10				Carcinogen C _a = Annual Average Non-Carcinogen C _c = 7Q10							
ID	Pollutant	RPT	Carcinogen yes	Background from upstream source (C _{bg}) Daily Max	Water Quality Criteria (C _w)	Draft Permit Limit (C _{dp})	20% of Draft Permit Limit	RPT	Background from upstream source (C _{bg}) Monthly Ave	Water Quality Criteria (C _w)	Draft Permit Limit (C _{dp})	20% of Draft Permit Limit	RPT	Water Quality Criteria (C _w)	Draft Permit Limit (C _{dp})	20% of Draft Permit Limit	RPT						
1	Antimony			0	0	592.334	90941.559	18188.312	No	0	0	0	0	261.324	48819.528	9763.906	No	3.73E+02	6.97E+04	1.39E+04	No		
2	Arsenic		YES	0	0	0	0	0	0	0	0	0	0	3.03E+01	9.80E+02	1.96E+02	No	-	-	-	-		
3	Beryllium			0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-		
4	Cadmium			0	0	4.347	667.418	133.484	No	0	0	0	0	0.644	120.237	24.047	No	-	-	-	-		
5	Chromium/ Chromium III			0	0	1537.913	236116.923	47223.385	No	0	0	0	0	200.051	37372.716	7474.543	No	-	-	-	-		
6	Chromium/ Chromium VI			0	0	16.000	2456.492	491.296	No	0	0	0	0	11.000	2054.977	410.995	No	-	-	-	-		
7	Copper	YES		3940	16.026	2767.603	553.521	Yes	0	1400	12.756	2364.813	476.963	Yes	1.30E+03	2.43E+05	4.86E+04	No	-	-	-		
8	Lead			0	0	64.531	9907.472	1981.494	No	0	0	0	0	2.515	469.762	93.956	No	-	-	-	-		
9	Mercury			0.2	2.400	368.474	73.695	No	0	0	0	0	0	0.012	2.242	0.448	No	4.24E+02	7.93E+00	1.59E+00	No		
10	Nickel			0	0	515.824	79194.900	15838.980	No	0	0	0	0	57.292	10703.096	2140.619	No	9.93E+02	1.85E+05	3.71E+04	No		
11	Selenium			0	0	20.000	3070.615	614.123	No	0	0	0	0	5.000	934.060	186.816	No	2.43E+03	4.54E+05	9.08E+04	No		
12	Silver			0	0	0.976	149.914	29.983	No	0	0	0	0	-	-	-	-	-	-	-	-		
13	Thallium			0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-		
14	Zinc			60	197.369	30302.181	6060.436	No	0	30	198.983	37173.272	7434.854	No	1.49E+04	2.78E+06	5.56E+05	No	-	-	-		
15	Cyanide			0	22.000	3377.677	675.535	No	0	0	5.200	971.444	194.289	No	9.33E+03	1.74E+06	3.49E+05	No	-	-	-		
16	Total Phenolic Compounds			0	280	-	-	-	0	90	-	-	-	-	-	-	-	-	-	-	-		
17	Hardness (As CaCO3)			0	48900	-	-	-	0	48900	-	-	-	-	-	-	-	-	-	-	-		
18	Acrolein			0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-		
19	Acrylonitrile	YES		0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-		
20	Aldrin	YES		0	0	3.000	460.592	92.118	No	0	1.300	242.861	48.572	No	2.94E+05	9.50E+02	1.90E+02	No	-	-	-		
21	Benzene	YES		0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
22	Bromoforn	YES		0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
23	Carbon Tetrachloride	YES		0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
24	Chlordane	YES		0	0	2.400	368.474	73.695	No	0	0	0	0	0.004	0.803	0.161	No	9.57E-01	3.09E+03	6.19E+02	No		
25	Chlorobenzene			0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
26	Chlorodibromo-Methane	YES		0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
27	Chloroethane			0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
28	2-Chloro-Ethylvinyl Ether			0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
29	Chloroform	YES		0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
30	4,4 - DDD	YES		0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
31	4,4 - DDE	YES		0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
32	4,4 - DDT	YES		0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
33	Dichlorobromo-Methane	YES		0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
34	1,1-Dichloroethane			0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
35	1,2-Dichloroethane	YES		0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
36	Trans-1,2-Dichloro-Ethylene			0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
37	1,1-Dichloroethylene	YES		0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
38	1,2-Dichloropropane			0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
39	1,3-Dichloro-Propylene			0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
40	Dieldrin	YES		0	0.240	36.847	7.369	No	0	0	0.056	10.462	2.092	No	3.12E+05	1.01E+01	2.02E+02	No	-	-	-		
41	Ethylbenzene			0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
42	Methyl Bromide			0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
43	Methyl Chloride			0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
44	Methylene Chloride	YES		0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
45	1,1,2,2-Tetrachloro-Ethane	YES		0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
46	Tetrachloro-Ethylene	YES		0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
47	Toluene			0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
48	Toxaphene	YES		0	0.730	112.077	22.415	No	0	0	0.0002	0.037	0.007	No	1.62E-04	5.23E-01	1.05E-01	No	-	-	-		
49	Tributyltin (TBT)	YES		0	0.460	70.624	14.125	No	0	0	0.072	13.451	2.690	No	-	-	-	-	-	-	-		
50	1,1,1-Trichloroethane			0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
51	1,1,2-Trichloroethane	YES		0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
52	Trichloroethylene	YES		0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
53	Vinyl Chloride	YES		0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
54	p-Chloro-m-Cresol			0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
55	2-Chlorophenol			0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
56	2,4-Dichlorophenol			0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
57	2,4,6-Trichlorophenol	YES		0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
58	4,6-Dinitro-Cresol			0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
59	4,6-Dinitrophenol			0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
60	4,6-Dinitro-2-methylphenol	YES		0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
61	Dioxin (2,3,7,8-TCDD)	YES		0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
62	2-Nitrophenol			0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
63	4-Nitrophenol			0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
64	Penachlorophenol	YES		0	8.723	1339.298	267.860	No	0	0	6.693	1250.282	250.056	No	1.77E+00	5.71E+03	1.14E+03	No	-	-	-		
65	Phenol			0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
66	2,4,6-Trichlorophenol	YES		0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
67	Acenaphthene			0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
68	Acenaphthylene			0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-		
69	Anthracene			0	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-				

Waste Load Allocation Summary

Comments included

☒ Yes ☐ No

General Information

Information
Verified By

KMM

Page 1

Receiving Stream Name Black Warrior River

Year File Was Created 1988

Previous File Name

OR: Local Name (If applicable)

Facility Name

Greensboro Lagoon

Previous Discharger Name

Or-AKA (Includes previous file name)

11 Digit HUC Code 03160113150

12 Digit HUC Code 031601130804

River Basin Black Warrior

County Hale

Use Classification S / F&W

Discharge Latitude 32.6411

Discharge Longitude -87.7466

Site Visit Completed? ☒ Yes ☐ No

Date of Site Visit 4/16/2014

Waterbody Impaired? ☐ Yes ☒ No

Antidegradation ☐ Yes ☒ No

Waterbody Tier Level Tier II

Use Support Category

Other Point Sources? ☐ Yes ☒ No

Sources Included in Model

Print Record

Close Form

Date of WLA Response 5/13/2014

Lat/Long Method Arcview

Approved TMDL?

☐ Yes ☒ No

Approval Date of TMDL

Permit Information

Permit Number AL0057193

Permit Status Active

Type of Discharger

- ☒ Municipal
- ☐ Industrial
- ☐ Semipublic/Private
- ☐ Mining

Waste Load Allocation Information

Modeled Reach Length 15.6

Miles

Date of Allocation 4/29/2014

Name of Model Used QUAL2E

Allocation Type Annual

Model Completed by Kimberly Minton

Type of Model Used Desk-top

Allocation Developed by Water Quality Branch

Waste Load Allocation Summary

Annual Effluent Limits	Conventional Parameters				Other Parameters			
	Qw	2	MGD		Qw	MGD		
	Season				Season			
	From				From			
	Through				Through			
CBOD5	25	mg/L			CBOD5		mg/L	
NH3-N	20	mg/L			TP		mg/L	
TKN		mg/L			TN		mg/L	
D.O.		mg/L			TSS		mg/L	
							mg/L	

"Monitor Only" Parameters for Effluent:	Parameter	Frequency	Parameter	Frequency
	TP	Monthly	DO	2x Monthly
	NO2+NO3-N	Monthly		
	TKN	Monthly		

Water Quality Characteristics Immediately Upstream of Discharge

Parameter	Summer	Winter
CBODu	2 mg/l	
NH3-N	0.11 mg/l	
Temperature	30 °C	
pH	7 su	

Hydrology at Discharge Location

Drainage Area Qualifier	Drainage Area	5942	sq mi	Method Used to Calculate
Exact	Stream 7Q10	575	cfs	ADEM Estimate w/USGS Gage Data
	Stream 1Q10	472	cfs	ADEM Estimate w/USGS Gage Data
	Stream 7Q2	967	cfs	ADEM Estimate w/USGS Gage Data
	Annual Average	10001	cfs	ADEM Estimate w/USGS Gage Data

Comments and/or Notations
Effluent D.O. - Monitor only

Mixing Zone Analysis Summary

Comments included

☒ Yes ☐ No

General Information

Page 1

Year File Was Started 2009

Information
Verified By CGG

Date of MZ Response 5/20/2009

Name of Receiving Stream Black Warrior River

Previous file name: Or-AKA (If applicable)

Facility Name Greensboro Lagoon

Previous Name of Discharger Or-AKA (If applicable)

11 Digit HUC Code USGS 03160113150

Other Point Sources? ☐ Yes ☒ No

12 Digit HUC Code 031601130804

Sources Included in the Model:

River Basin Black Warrior

County Hale

Use Classification S / F&W

Discharge Latitude 32.64333

Discharge Longitude -87.74061

Site Visit Completed? ☒ Yes ☐ No

Date of Site Visit 4/9/2009

Print Record

Close Form

Permit Information

Type of Discharger

☒ Municipal
☐ Industrial
☐ Semipublic/Private

Permit Number AL0057193

Permit Status Active

Hydrology

Drainage Area 5942 sq mi

Stream 7Q10 593.85 cfs

Stream 1Q10 499.75 cfs

Stream 7Q2 cfs

Method Used to Calculate

ADEM Estimate w/USGS Gage Data

ADEM Estimate w/USGS Gage Data

Date of MZ Analysis 5/20/2009

Model Completed by Chris Goodman

Discharge Design Flow 2 MGD

Seasonal? ☐ Yes ☒ No

If not seasonal, only the summer
sections will be used

Pollutant Category

Whole Effluent Toxicity (WET) ☒ Thermal ☐ Pathogens ☐

Mixing Zone Analysis Summary - Page 2

WET Parameters

Summer

Acute

Ambient Streamflow cfs
ZID Length Meters
ZID IWC %

Chronic

Ambient Streamflow cfs
Mixing Zone Length Meters
Mixing Zone IWC %

Winter

Acute

Ambient Streamflow cfs
ZID Length Meters
ZID IWC %

Chronic

Ambient Streamflow cfs
Mixing Zone Length Meters
Mixing Zone IWC %

Thermal Parameters

Summer

Ambient Streamflow cfs
Mixing Zone Length Meters
Max. Effluent Temp °C

Winter

Ambient Streamflow cfs
Mixing Zone Length Meters
Max. Effluent Temp °C

Pathogen Parameters

Summer

Ambient Streamflow cfs
ZID Length Meters
Max. Effluent Fecal Conc Cols/100 mls
Max. Effluent Enterococci
Conc (for coastal waters) Cols/100 mls

Winter

Ambient Streamflow cfs
ZID Length Meters
Max. Effluent Fecal Conc Cols/100 mls
Max. Effluent Enterococci
Conc (for coastal waters) Cols/100 mls

Comments
and/or
Notations


First MZ analysis performed for this facility.

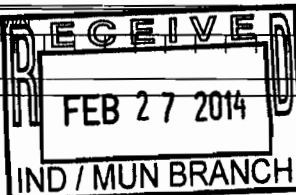
If comments are made, check the "yes" box at the top of page one.

Last Revision: 8/30/06

Please print or type in the unshaded areas only.

Form Approved. OMB No. 2040-0086.

FORM 1 GENERAL		 U.S. ENVIRONMENTAL PROTECTION AGENCY GENERAL INFORMATION Consolidated Permits Program (Read the "General Instructions" before starting.)		I. EPA I.D. NUMBER	
LABEL ITEMS I. EPA I.D. NUMBER III. FACILITY NAME V. FACILITY MAILING ADDRESS VI. FACILITY LOCATION		PLEASE PLACE LABEL IN THIS SPACE		GENERAL INSTRUCTIONS If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (the area to the left of the label space lists the information that should appear), please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete items I, III, V, and VI (except VI-B which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.	
II. POLLUTANT CHARACTERISTICS					
INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms.					
SPECIFIC QUESTIONS		Mark "X" YES NO FORM ATTACHED		SPECIFIC QUESTIONS	
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S. ? (FORM 2A)		X 16 17 18		B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S. ? (FORM 2B)	
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)		X 22 23 24		D. Is this a proposed facility (other than those described in A or B above) which will result in a discharge to waters of the U.S. ? (FORM 2D)	
E. Does or will this facility treat, store, or dispose of hazardous wastes ? (FORM 3)		X 28 29 30		F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X 34 35 36		H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)	
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X 40 41 42		J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)	
III. NAME OF FACILITY 1 SKIP Greensboro Lagoon 15 16 - 29 30					
IV. FACILITY CONTACT					
A. NAME & TITLE (last, first, & title)				B. PHONE (area code & no.)	
2 Jay, John Superintendent 15 16				(334) 624-8448 45 46 48 49 51 52 55	
V. FACILITY MAILING ADDRESS					
A. STREET OR P.O. BOX					
3 P.O. Box 546 15 16					
B. CITY OR TOWN				C. STATE	D. ZIP CODE
4 Greensboro 15 16				AL 40 41 42	36744 47 51
VI. FACILITY LOCATION					
A. STREET, ROUTE, OR OTHER SPECIFIC IDENTIFIER					
5 64th County Road 19 15 16					
B. COUNTY NAME					
Hale 46 70					
C. CITY OR TOWN				D. STATE	E. ZIP CODE
6 Greensboro 15 16				AL 40 41 42	36744 47 51 52 54



CONTINUED FROM THE FRONT

VII. SIC CODES (4-digit, in order of priority)

A. FIRST										B. SECOND									
C	7									C	7								
(specify) Municipal facility, Domestic Waste										(specify)									
15	16									15	16								
C. THIRD										D. FOURTH									
C	7									C	7								
(specify)										(specify)									
15	16									15	16								

VIII. OPERATOR INFORMATION

A. NAME																									B. Is the name listed in Item VIII-A also the owner?					
C	8																									<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO				
Utilities Board of the City of Greensboro																														
15	16																													
C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box: if "Other," specify.)																									D. PHONE (area code & no.)					
F = FEDERAL S = STATE P = PRIVATE										M = PUBLIC (other than federal or state) O = OTHER (specify)										M (specify)					A (334) 624-8448					

E. STREET OR P.O. BOX																									
Post Office Box 546																									
26																									

F. CITY OR TOWN															G. STATE		H. ZIP CODE		IX. INDIAN LAND			
C	B														AL		36744		Is the facility located on Indian lands?			
Greensboro																			<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
15	16														40	41	42	47	51	52		

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water)										D. PSD (Air Emissions from Proposed Sources)									
C	9									C	9								
N AL0057193										P									
15	16									15	16								
B. UIC (Underground Injection of Fluids)										E. OTHER (specify)									
C	9									(specify)									
U																			
15	16																		
C. RCRA (Hazardous Wastes)										E. OTHER (specify)									
C	9									(specify)									
R																			
15	16																		

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers, and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS (provide a brief description)

Public facility- treatment of municipal sewage.

XIII. CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)															B. SIGNATURE															C. DATE SIGNED									
John C. Jay, Jr.																														2-25-14									

COMMENTS FOR OFFICIAL USE ONLY

C																									
15	16																								

FACILITY NAME AND PERMIT NUMBER:

Greensboro Lagoon AL0057193

Form Approved 1/14/99
OMB Number 2040-0086

FORM
2A
NPDES

NPDES FORM 2A APPLICATION OVERVIEW

APPLICATION OVERVIEW

Form 2A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some applicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form 2A you must complete.

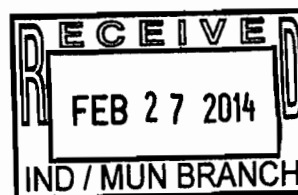
BASIC APPLICATION INFORMATION:

- A. **Basic Application Information for all Applicants.** All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.
- B. **Additional Application Information for Applicants with a Design Flow ≥ 0.1 mgd.** All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.
- C. **Certification.** All applicants must complete Part C (Certification).

SUPPLEMENTAL APPLICATION INFORMATION:

- D. **Expanded Effluent Testing Data.** A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):
 - 1. Has a design flow rate greater than or equal to 1 mgd,
 - 2. Is required to have a pretreatment program (or has one in place), or
 - 3. Is otherwise required by the permitting authority to provide the information.
- E. **Toxicity Testing Data.** A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):
 - 1. Has a design flow rate greater than or equal to 1 mgd,
 - 2. Is required to have a pretreatment program (or has one in place), or
 - 3. Is otherwise required by the permitting authority to submit results of toxicity testing.
- F. **Industrial User Discharges and RCRA/CERCLA Wastes.** A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:
 - 1. All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
 - 2. Any other industrial user that:
 - a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
 - b. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
 - c. Is designated as an SIU by the control authority.
- G. **Combined Sewer Systems.** A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).

ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)



FACILITY NAME AND PERMIT NUMBER:

Greensboro Lagoon AL0057193

Form Approved 1/14/99
OMB Number 2040-0086

BASIC APPLICATION INFORMATION

PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:

All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet.

A.1. Facility Information.

Facility name Greensboro Lagoon

Mailing Address Post Office Box 546
Greensboro, AL 36744

Contact person John C. Jay, Jr.

Title Superintendent

Telephone number (334) 624-8448

Facility Address 649 County Road 19

(not P.O. Box)

A.2. Applicant Information. If the applicant is different from the above, provide the following:

Applicant name Utilities Board of the City of Greensboro

Mailing Address Same

Contact person Same

Title Same

Telephone number

Is the applicant the owner or operator (or both) of the treatment works?

☒ owner

☒ operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

☐ facility

☒ applicant

A.3. Existing Environmental Permits. Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES AL0057193

PSD

UIC

Other

RCRA

Other

A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name	Population Served	Type of Collection System	Ownership
<u>City of Greensboro</u>	<u>4000</u>	<u>Separate</u>	<u>Municipal</u>
<u></u>	<u></u>	<u></u>	<u></u>
<u></u>	<u></u>	<u></u>	<u></u>
Total population served		<u></u>	<u></u>

FACILITY NAME AND PERMIT NUMBER:

Greensboro Lagoon AL0057193

Form Approved 1/14/99
OMB Number 2040-0086

A.5. Indian Country.

- a. Is the treatment works located in Indian Country?

☐ Yes ☒ No

- b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

☐ Yes ☒ No

A.6. Flow. Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

- a. Design flow rate
- 2.0
- mgd

	Two Years Ago	Last Year	This Year	
b. Annual average daily flow rate	<u>0.674</u>	<u>0.847</u>	<u>0.914</u>	mgd
c. Maximum daily flow rate	<u>1.751</u>	<u>2.415</u>	<u>1.836</u>	mgd

A.7. Collection System. Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

☒ Separate sanitary sewer _____ %
☐ Combined storm and sanitary sewer _____ %

A.8. Discharges and Other Disposal Methods.

- a. Does the treatment works discharge effluent to waters of the U.S.?
- ☒
- Yes
- ☐
- No

If yes, list how many of each of the following types of discharge points the treatment works uses:

- i. Discharges of treated effluent 1
- ii. Discharges of untreated or partially treated effluent _____
- iii. Combined sewer overflow points _____
- iv. Constructed emergency overflows (prior to the headworks) _____
- v. Other _____

- b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.?

☐ Yes ☒ No

If yes, provide the following for each surface impoundment:

Location: _____

Annual average daily volume discharged to surface impoundment(s) _____ mgd

Is discharge _____ continuous or _____ intermittent?

- c. Does the treatment works land-apply treated wastewater?

☐ Yes ☒ No

If yes, provide the following for each land application site:

Location: _____

Number of acres: _____

Annual average daily volume applied to site: _____ Mgd

Is land application _____ continuous or _____ intermittent?

- d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works?

☐ Yes ☒ No

FACILITY NAME AND PERMIT NUMBER:

Greensboro Lagoon AL0057193

Form Approved 1/14/99
OMB Number 2040-0086

If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

If transport is by a party other than the applicant, provide:

Transporter name: _____

Mailing Address: _____

Contact person: _____

Title: _____

Telephone number: _____

For each treatment works that receives this discharge, provide the following:

Name: _____

Mailing Address: _____

Contact person: _____

Title: _____

Telephone number: _____

If known, provide the NPDES permit number of the treatment works that receives this discharge. _____

Provide the average daily flow rate from the treatment works into the receiving facility. _____

mgd

- e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8.a through A.8.d above (e.g., underground percolation, well injection)?

____ Yes



No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable): _____

Annual daily volume disposed of by this method: _____

Is disposal through this method

_____ continuous or

_____ intermittent?

FACILITY NAME AND PERMIT NUMBER:

Greensboro Lagoon AL0057193

Form Approved 1/14/99
OMB Number 2040-0086**WASTEWATER DISCHARGES:**

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

A.9. Description of Outfall.

- a. Outfall number 001
- b. Location Greensboro 36744
(City or town, if applicable) (Zip Code)
Hale Alabama
(County) (State)
32-38-31 87-44-48
(Latitude) (Longitude)
- c. Distance from shore (if applicable) 55.00 ft.
- d. Depth below surface (if applicable) 23.35 ft.
- e. Average daily flow rate 0.92 mgd
- f. Does this outfall have either an intermittent or a periodic discharge?
Yes ☒ No (go to A.9.g.)
- If yes, provide the following information:
- Number of times per year discharge occurs: _____
- Average duration of each discharge: _____
- Average flow per discharge: _____ mgd
- Months in which discharge occurs: _____
- g. Is outfall equipped with a diffuser? ☒ Yes No

A.10. Description of Receiving Waters.

- a. Name of receiving water Black Warrior River
- b. Name of watershed (if known) _____
- United States Soil Conservation Service 14-digit watershed code (if known): _____
- c. Name of State Management/River Basin (if known): _____
- United States Geological Survey 8-digit hydrologic cataloging unit code (if known): _____
- d. Critical low flow of receiving stream (if applicable):
acute _____ cfs chronic _____ cfs
- e. Total hardness of receiving stream at critical low flow (if applicable): _____ mg/l of CaCO₃

FACILITY NAME AND PERMIT NUMBER:

Greensboro Lagoon AL0057193

Form Approved 1/14/99
OMB Number 2040-0086

A.11. Description of Treatment.

- a. What levels of treatment are provided? Check all that apply.

☒ Primary ☒ Secondary
☐ Advanced ☐ Other. Describe: _____

- b. Indicate the following removal rates (as applicable):

Design BOD₅ removal or Design CBOD₅ removal 85 %
 Design SS removal 65 %
 Design P removal _____ %
 Design N removal _____ %
 Other _____ %

- c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

None

If disinfection is by chlorination, is dechlorination used for this outfall?

_____ Yes ☒ No

- d. Does the treatment plant have post aeration?

_____ Yes ☒ No

A.12. Effluent Testing Information. All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 001

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	<u>6.0</u>	s.u.			
pH (Maximum)	<u>9.0</u>	s.u.			
Flow Rate	<u>1.834</u>	<u>MGD</u>	<u>0.916</u>	<u>MGD</u>	<u>7</u>
Temperature (Winter)					
Temperature (Summer)					

* For pH please report a minimum and a maximum daily value

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		

CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.

BIOCHEMICAL OXYGEN DEMAND (Report one)	BOD-5							
	CBOD-5	<u>11.8</u>	<u>mg/l</u>	<u>9.3</u>	<u>mg/l</u>	<u>7</u>	<u>SAMPLE/MEAS</u>	<u>25.0</u>
FECAL COLIFORM		<u>32.7</u>	<u>col/100ml</u>	<u>18.5</u>	<u>col/100ml</u>	<u>6</u>	<u>SAMPLE/MEAS</u>	<u>200</u>
TOTAL SUSPENDED SOLIDS (TSS)		<u>32.9</u>	<u>mg/l</u>	<u>27.0</u>	<u>mg/l</u>	<u>7</u>	<u>SAMPLE/MEAS</u>	<u>90.0</u>

END OF PART A.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:

Greensboro Lagoon AL0057193

Form Approved 1/14/99
OMB Number 2040-0086**BASIC APPLICATION INFORMATION****PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).**All applicants with a design flow rate ≥ 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification).**B.1. Inflow and Infiltration.** Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.

_____gpd

Briefly explain any steps underway or planned to minimize inflow and infiltration.

MULTI-YEAR EFFORT TO REPAIR AND LINE THE TWO PRIMARY OUTFALL LINES (12" & 18")
FOR THE CITY, AS WELL AS REPAIR AND LINE THE MANHOLES.**B.2. Topographic Map.** Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.)

- The area surrounding the treatment plant, including all unit processes.
- The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.
- Each well where wastewater from the treatment plant is injected underground.
- Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4-mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.
- Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.
- If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

B.3. Process Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g., chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.**B.4. Operation/Maintenance Performed by Contractor(s).**Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? ____ Yes ☒ No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name: _____

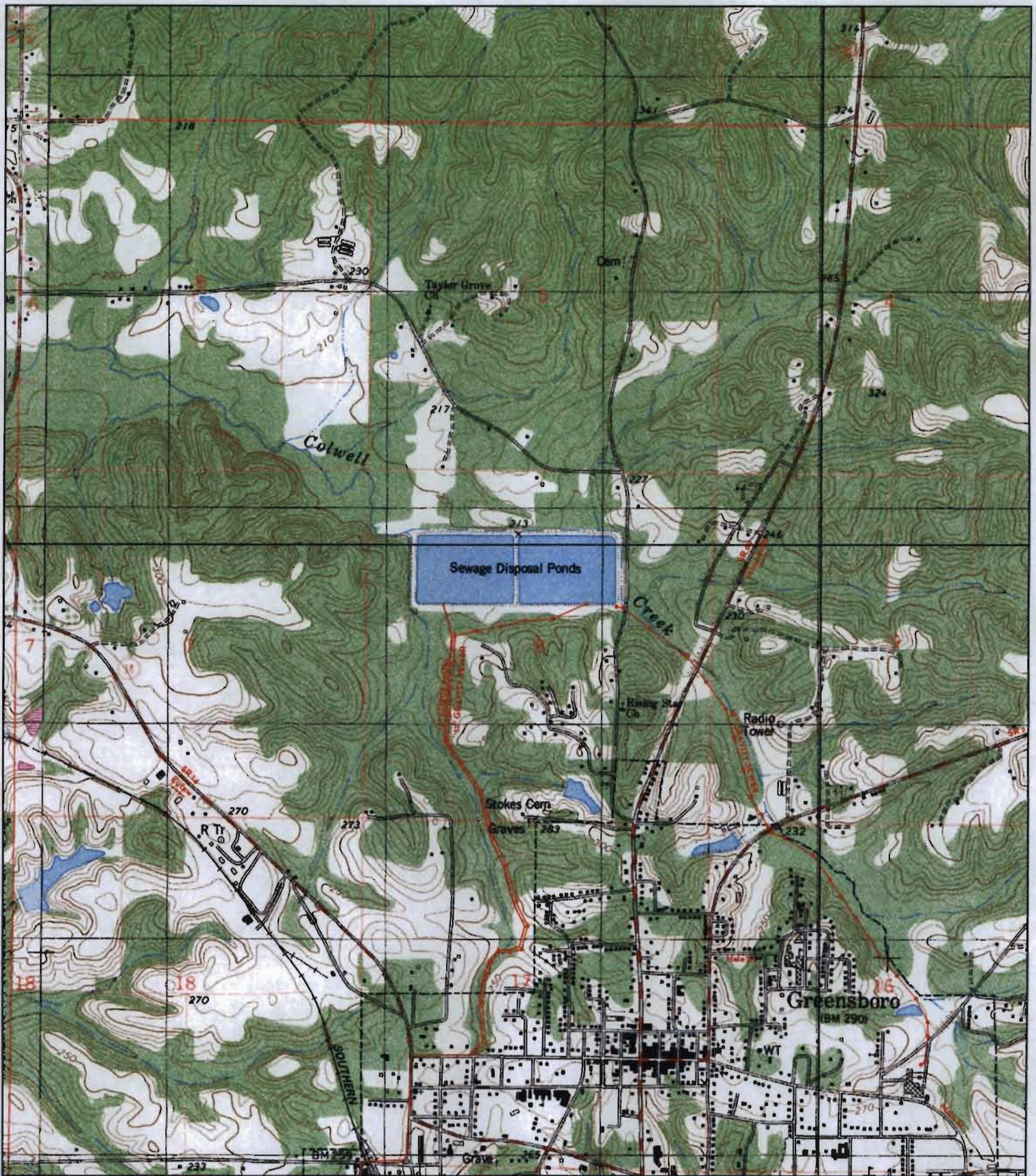
Mailing Address: _____

Telephone Number: _____

Responsibilities of Contractor: _____

B.5. Scheduled Improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

- List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.
001
- Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.
____ Yes ☒ No



NPDES PERMIT NO. AL0057193
 Greensboro Lagoon
 Utilities Board of the City of Greensboro, Alabama

TOPOGRAPHIC MAP

DESIGNED	DRAWN
CHECKED	
SCALE	HORIZ: 1"=2000'
DATE 23 JAN 2014	PROJECT
SHT 1	OF 1



GOODWYN, MILLS & CAWOOD, INC.
 ENGINEERING ARCHITECTURE LANDSCAPE ARCHITECTURE PLANNING
 125 Interstate Park Drive, P O Box 3605, Montgomery Alabama 36109 Phone: (334) 271-3200 Fax: (334) 272-1566
 1102 South 20th Street, Birmingham Alabama 35205 Phone: (205) 879-4462 Fax: (205) 879-4493

FSN: ****

Tract: ****

*Drainage ditch into Caldwell Creek
in pink*



USDA United States Department of Agriculture
Farm Service Agency

*Caldwell Creek
in Green*



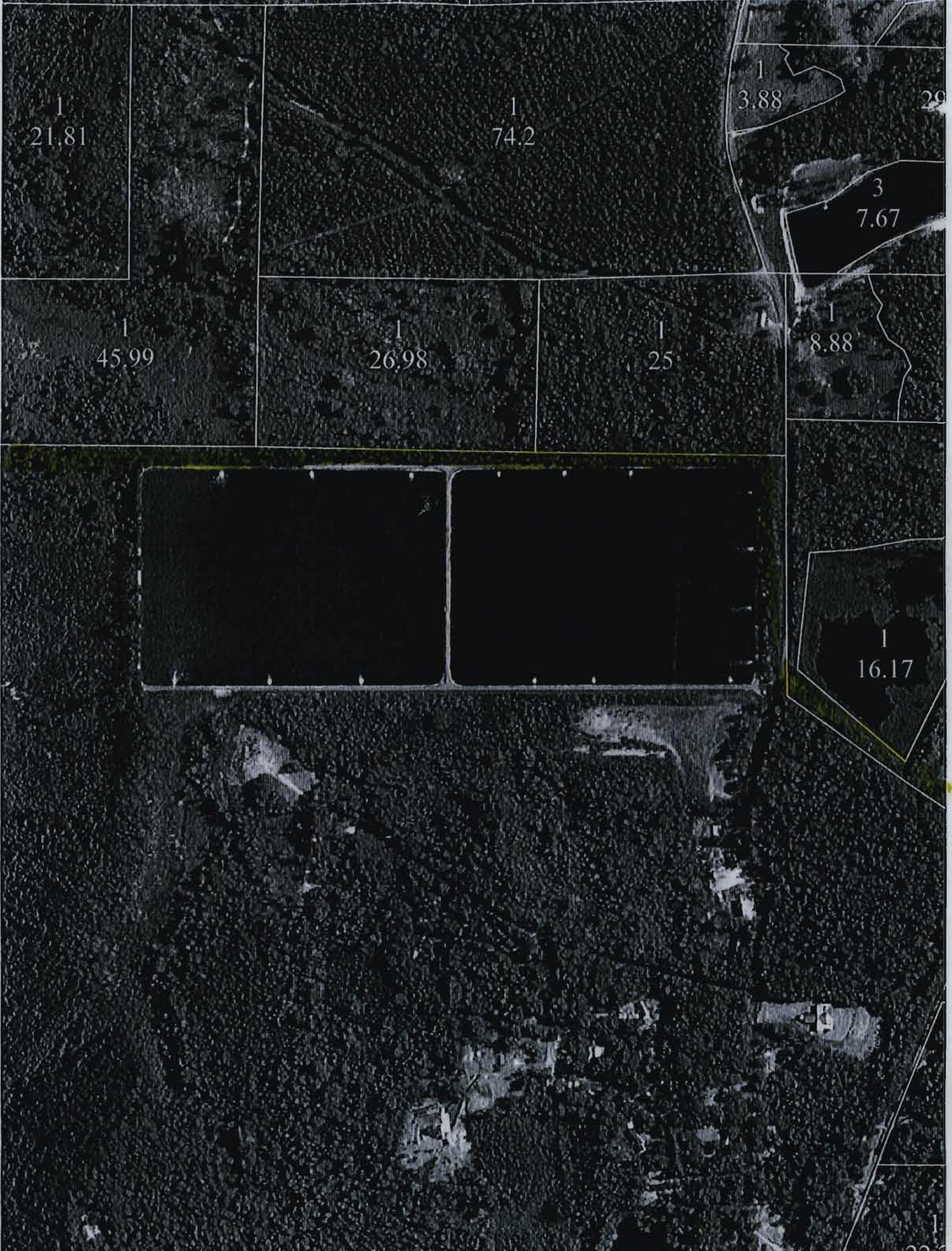
Hale Co. FSA

Digital Orthophotography
Not to Scale

February 25, 2009

*Cell 1 - 12.5 acres
Cell 2 - 25.0 acres
Cell 3 - 37.5 acres*

Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.



Tract: ****



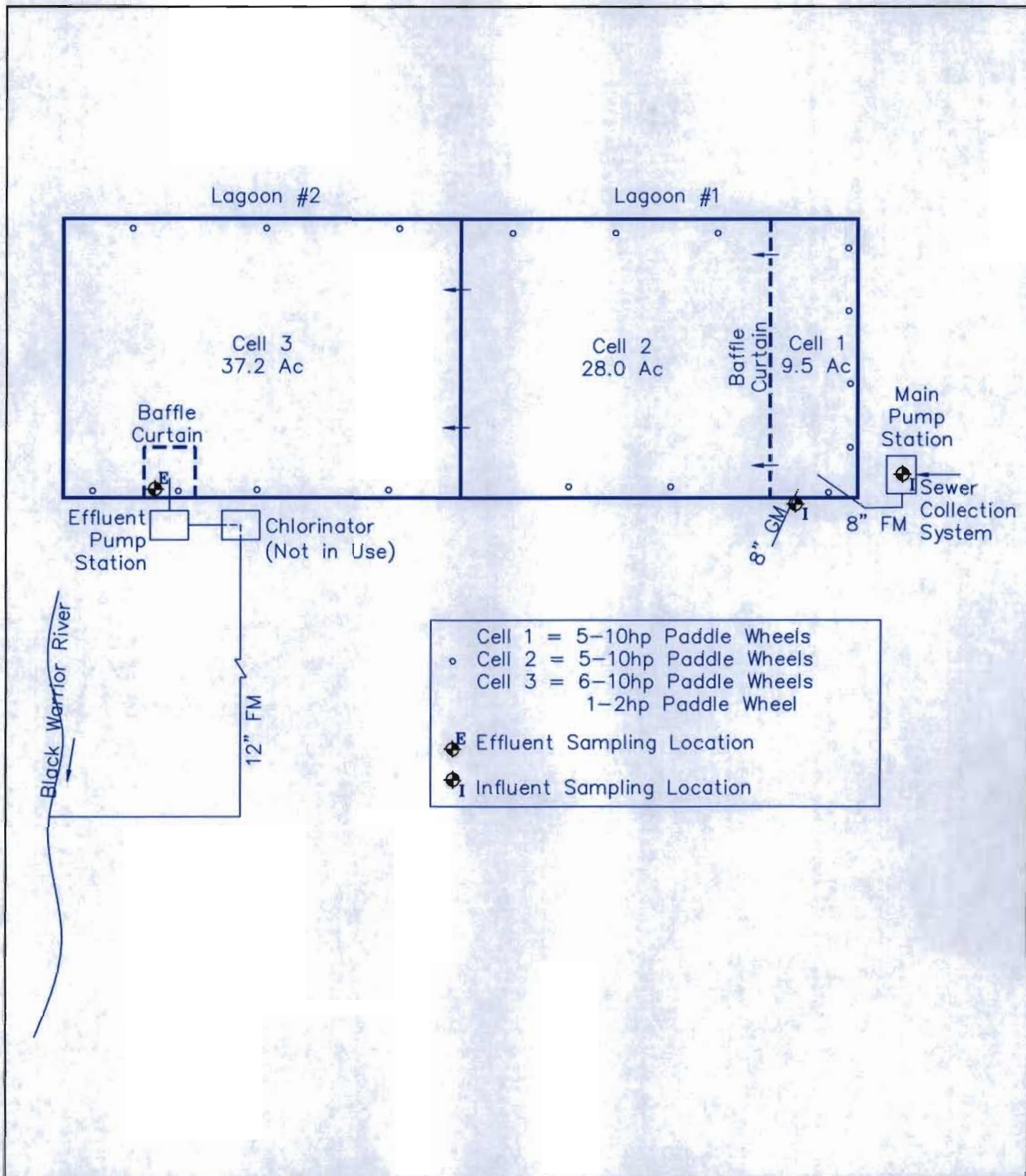
USDA United States Department of Agriculture
Farm Service Agency



Hale Co. FSA
Digital Orthophotography
Not to Scale

February 25, 2009

Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS



NPDES PERMIT NO. AL0057193 Greensboro Lagoon Utilities Board of the City of Greensboro, Alabama	PROCESS FLOW SCHEMATIC	<table border="1"> <tr> <td>DESIGNED</td> <td>DRAWN</td> </tr> <tr> <td>CHECKED</td> <td>EAJ</td> </tr> <tr> <td>SCALE</td> <td>HORIZ: NTS</td> </tr> <tr> <td>DATE</td> <td>VERT: N/A</td> </tr> <tr> <td>13 AUG 04</td> <td>PROJECT</td> </tr> <tr> <td colspan="2">SHT 1 OF 1</td> </tr> </table>	DESIGNED	DRAWN	CHECKED	EAJ	SCALE	HORIZ: NTS	DATE	VERT: N/A	13 AUG 04	PROJECT	SHT 1 OF 1	
DESIGNED	DRAWN													
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SHT 1 OF 1														
<table border="1"> <tr> <td data-bbox="129 1900 211 1984"> </td> <td data-bbox="324 1900 1104 1984"> GOODWYN, MILLS & CAWOOD, INC. ENGINEERING ARCHITECTURE LANDSCAPE ARCHITECTURE PLANNING 125 Interstate Park Drive, P O Box 3605, Montgomery Alabama 36109 Phone: (334) 271-3200 Fax: (334) 272-1566 1102 South 20th Street, Birmingham Alabama 35205 Phone: (205) 879-4462 Fax: (205) 879-4493 </td> </tr> </table>				GOODWYN, MILLS & CAWOOD, INC. ENGINEERING ARCHITECTURE LANDSCAPE ARCHITECTURE PLANNING 125 Interstate Park Drive, P O Box 3605, Montgomery Alabama 36109 Phone: (334) 271-3200 Fax: (334) 272-1566 1102 South 20 th Street, Birmingham Alabama 35205 Phone: (205) 879-4462 Fax: (205) 879-4493										
	GOODWYN, MILLS & CAWOOD, INC. ENGINEERING ARCHITECTURE LANDSCAPE ARCHITECTURE PLANNING 125 Interstate Park Drive, P O Box 3605, Montgomery Alabama 36109 Phone: (334) 271-3200 Fax: (334) 272-1566 1102 South 20 th Street, Birmingham Alabama 35205 Phone: (205) 879-4462 Fax: (205) 879-4493													

FACILITY NAME AND PERMIT NUMBER:

Greensboro Lagoon AL0057193

Form Approved 1/14/99
OMB Number 2040-0086

- c. If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).

- d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

Implementation Stage	Schedule	Actual Completion
	MM / DD / YYYY	MM / DD / YYYY
- Begin construction	___/___/___	___/___/___
- End construction	___/___/___	___/___/___
- Begin discharge	___/___/___	___/___/___
- Attain operational level	___/___/___	___/___/___

- e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? ☐ Yes ☐ No

Describe briefly: _____

B.6. EFFLUENT TESTING DATA (GREATER THAN 0.1 MGD ONLY).

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall Number: 001

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
AMMONIA (as N)	3.3	mg/L	2.7	mg/L	7	SAMPLE/MEAS	20
CHLORINE (TOTAL RESIDUAL, TRC)	40.05	mg/L	40.05	mg/L	2		0.05
DISSOLVED OXYGEN	10.01	mg/L	10.1	mg/L	1		
TOTAL KJELDAHL NITROGEN (TKN)	7.1	mg/L	7.1	mg/L	7	"	REPORT
NITRATE PLUS NITRITE NITROGEN	0.4	mg/L	0.4	mg/L	7	"	REPORT
OIL and GREASE							
PHOSPHORUS (Total)	3.1	mg/L	3.1 mg/L	mg/L	7	"	REPORT
TOTAL DISSOLVED SOLIDS (TDS)	188	mg/L	188	mg/L	1		
OTHER							

END OF PART B.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:

Greensboro Lagoon AL0057193

Form Approved 1/14/99
OMB Number 2040-0086**BASIC APPLICATION INFORMATION****PART C. CERTIFICATION**

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

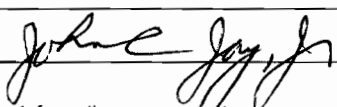
Indicate which parts of Form 2A you have completed and are submitting:

Basic Application Information packet

Supplemental Application Information packet:

☐ Part D (Expanded Effluent Testing Data)☒ Part E (Toxicity Testing: Biomonitoring Data)☒ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)☐ Part G (Combined Sewer Systems)**ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title John C. Jay, Jr. SuperintendentSignature Telephone number (334) 624-8448Date signed 2-25-14 

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:

FACILITY NAME AND PERMIT NUMBER: Greensboro Lagoon AL0057193										Form Approved 1/14/99 CMB Number 2043-0086	
SUPPLEMENTAL APPLICATION INFORMATION											
PART D. EXPANDED EFFLUENT TESTING DATA											
Refer to the directions on the cover page to determine whether this section applies to the treatment works.											
Effluent Testing: 1.0 mgd and Pretreatment Treatment Works. If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.											
Outfall number: 0012 (Complete once for each outfall discharging effluent to waters of the United States.)											
POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
METALS (TOTAL RECOVERABLE), CYANIDE, PHENOLS, AND HARDNESS.											
ANTIMONY	0	mg/L	0	lbs/day	0	mg/L	0	lbs/day	3	EPA 200.7	0.01
ARSENIC	0	mg/L	0	lbs/day	0	mg/L	0	lbs/day	3	EPA 200.7	0.01
BERYLLIUM	0	mg/L	0	lbs/day	0	mg/L	0	lbs/day	3	EPA 200.7	0.004
CADMIUM	0	mg/L	0	lbs/day	0	mg/L	0	lbs/day	3	EPA 200.7	0.07
CHROMIUM	0	mg/L	0	lbs/day	0	mg/L	0	lbs/day	3	EPA 200.7	0.07
COPPER	3.94	mg/L	42.9	lbs/day	1.40	mg/L	17.4	lbs/day	3	EPA 200.7	0.04
LEAD	0	mg/L	0	lbs/day	0	mg/L	0	lbs/day	3	EPA 200.7	0.05
MERCURY	0.0002	mg/L	0.002	lbs/day	0.0001	mg/L	0.001	lbs/day	3	EPA 245.1	0.0002
NICKEL	0	mg/L	0	lbs/day	0	mg/L	0	lbs/day	3	EPA 200.7	0.07
SELENIUM	0	mg/L	0	lbs/day	0	mg/L	0	lbs/day	3	EPA 200.7	0.01
SILVER	0	mg/L	0	lbs/day	0	mg/L	0	lbs/day	3	EPA 200.7	0.04
THALLIUM	0	mg/L	0	lbs/day	0	mg/L	0	lbs/day	3	EPA 200.7	0.01
ZINC	0.06	mg/L	0.653	lbs/day	0.03	mg/L	0.33	lbs/day	3	EPA 200.7	0.02
CYANIDE	0	mg/L	0	lbs/day	0	mg/L	0	lbs/day	3	4500 CN-	0.02
TOTAL PHENOLIC COMPOUNDS	0.28	mg/L	3.47	lbs/day	0.09	mg/L	1.16	lbs/day	3	SM 5530	0.07
HARDNESS (AS CaCO ₃)	48.9	mg/L	498	lbs/day	44.9	mg/L	557	lbs/day	3	SM 2340B	1.0
Use this space (or a separate sheet) to provide information on other metals requested by the permit writer.											

FACILITY NAME AND PERMIT NUMBER:
 Greensboro Lagoon AL0057193

Form Approved 1/14/99
 OMB Number 2040-0085

Outfall number: 0012 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
VOLATILE ORGANIC COMPOUNDS.											
ACROLEIN	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 624	5
ACRYLONITRILE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 624	5
BENZENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 624	5
BROMOFORM	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 624	5
CARBON TETRACHLORIDE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 624	5
CHLOROBENZENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 624	5
CHLORODIBROMO-METHANE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 624	5
CHLOROETHANE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 624	5
2-CHLORO-ETHYL VINYL ETHER	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 624	5
CHLOROFORM	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 624	5
DICHLOROBROMO-METHANE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 624	5
1,1-DICHLOROETHANE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 624	5
1,2-DICHLOROETHANE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 624	5
TRANS-1,2-DICHLORO-ETHYLENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 624	5
1,1-DICHLOROETHYLENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 624	5
1,2-DICHLOROPROPANE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 624	5
1,3-DICHLORO-PROPYLENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 624	5
ETHYLBENZENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 624	5
METHYL BROMIDE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 624	5
METHYL CHLORIDE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 624	5
METHYLENE CHLORIDE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 624	5
1,1,2,2-TETRACHLORO-ETHANE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 624	5
TETRACHLORO-ETHYLENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 624	5
TOLUENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 624	5

FACILITY NAME AND PERMIT NUMBER: Greensboro Lagoon AL0057193											Form Approved 1/14/99 OMB Number 2040-0086	
Outfall number: 0012 (Complete once for each outfall discharging effluent to waters of the United States.)												
POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL	
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples			
1,1,1-TRICHLOROETHANE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 624	5	
1,1,2-TRICHLOROETHANE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 624	5	
TRICHLOROETHYLENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 624	5	
VINYL CHLORIDE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 624	5	
Use this space (or a separate sheet) to provide information on other volatile organic compounds requested by the permit writer.												
ACID-EXTRACTABLE COMPOUNDS												
P-CHLORO-M-CRESOL	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9	
2-CHLOROPHENOL	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9	
2,4-DICHLOROPHENOL	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9	
2,4-DIMETHYLPHENOL	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9	
4,6-DINITRO-O-CRESOL	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 625	27.2	
2,4-DINITROPHENOL	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	27.2	
2-NITROPHENOL	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9	
4-NITROPHENOL	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9	
PENTACHLOROPHENOL	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	50	
PHENOL	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9	
2,4,6-TRICHLOROPHENOL	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9	
Use this space (or a separate sheet) to provide information on other acid-extractable compounds requested by the permit writer.												
BASE-NEUTRAL COMPOUNDS												
ACENAPHTHENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9	
ACENAPHTHYLENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9	
ANTHRACENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9	
BENZIDINE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 625	109	
BENZO(A)ANTHRACENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9	
BENZO(A)PYRENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9	

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Outfall number: 0012 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
3,4 BENZO-FLUORANTHENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
BENZO(GH)PERYLENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
BENZO(K)FLUORANTHENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
BIS (2-CHLOROETHOXY) METHANE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
BIS (2-CHLOROETHYL) ETHER	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
BIS (2-CHLOROISO-PROPYL) ETHER	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
BIS (2-ETHYLHEXYL) PHTHALATE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
4-BROMOPHENYL PHENYL ETHER	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
BUTYL BENZYL PHTHALATE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
2-CHLORONAPHTHALENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
4-CHLOROPHENYL PHENYL ETHER	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
CHRYSENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
DIN-BUTYL PHTHALATE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
DIN-OCTYL PHTHALATE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
DIBENZO(A,H) ANTHRACENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
1,2-DICHLORO BENZENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
1,3-DICHLORO BENZENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
1,4-DICHLORO BENZENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
3,3-DICHLORO BENZIDINE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 625	10.9
DIETHYL PHTHALATE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
DIMETHYL PHTHALATE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
2,4-DINITROTOLUENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
2,6-DINITROTOLUENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
1,2-DIPHENYLHYDRAZINE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 625	10.9

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Outfall number: 0012 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
FLUORANTHENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
FLUORENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
HEXACHLOROBENZENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
HEXACHLOROBUTADIENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
HEXACHLOROCYCLO-PENTADIENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	50
HEXACHLOROETHANE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
INDENO(1,2,3-CD)PYRENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
ISOPHORONE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
NAPHTHALENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
NITROBENZENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	625.00	10.9
N-NITROSODI-N-PROPYLAMINE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
N-NITROSODI-METHYLAMINE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
N-NITROSODI-PHENYLAMINE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	3	EPA 625	10.9
PHENANTHRENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
PYRENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9
1,2,4-TRICHLOROBENZENE	0	µg/L	0	lbs/day	0	µg/L	0	lbs/day	4	EPA 625	10.9

Use this space (or a separate sheet) to provide information on other base-neutral compounds requested by the permit writer.

Use this space (or a separate sheet) to provide information on other pollutants (e.g., pesticides) requested by the permit writer.

END OF PART D.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:

Greensboro Lagoon AL0057193

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SUPPLEMENTAL APPLICATION INFORMATION

PART E. TOXICITY TESTING DATA

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd, 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403), or 3) POTWs required by the permitting authority to submit data for these parameters

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

E.1. Required Tests.

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

____ chronic ☒ acute

E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

Test number: 1 Test number: 1A Test number: _____

a. Test information.

Test species & test method number	CERIODADPHNIA DUBIA	PIMEPHALUS PROMELAS	
Age at initiation of test	< 24 Hrs	2-3 DAYS	
Outfall number	001T	001T	
Dates sample collected	10/7/13 - 10/8/13	10/7/13 - 10/8/13	
Date test started	10/8/13 - 10/10/13	10/9/13 - 10/11/13	
Duration	47 Hrs	46 Hrs	

b. Give toxicity test methods followed.

Manual title	48 HR CERIODADPHNIA TOX TEST EPA METHOD # 200.210	48 HR FATHEAD MINNOW TOX TEST EPA METHOD # 200.210	
Edition number and year of publication			
Page number(s)			

c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.

24-Hour composite	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Grab			

d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)

Before disinfection	N/A	N/A	
After disinfection			
After dechlorination			

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Test number: _____

e. Describe the point in the treatment process at which the sample was collected.

Sample was collected:

EFFLUENT DISCHARGE

EFFLUENT DISCHARGE

f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.

Chronic toxicity

Acute toxicity

g. Provide the type of test performed.

Static

48 HR ACUTE SCREENING

48 HR ACUTE SCREENING

Static-renewal

Flow-through

h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.

Laboratory water

MHRW

MHRW

Receiving water

i. Type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.

Fresh water

Salt water

j. Give the percentage effluent used for all concentrations in the test series.

7%

7%

k. Parameters measured during the test. (State whether parameter meets test method specifications)

pH

7.44 - 8.25

7.30 - 8.25

Salinity

Temperature

24°C - 25°C

24.0°C - 24.8°C

Ammonia

Dissolved oxygen

8.5 - 8.7

8.0 8.7

l. Test Results.

Acute:

Percent survival in 100% effluent

%

%

%

LC₅₀

95% C.I.

%

%

%

Control percent survival

100

%

100

%

%

Other (describe) 7%

100%

100%

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Chronic:

NOEC	%	%	%
IC ₂₅	%	%	%
Control percent survival	%	%	%
Other (describe)			

m. Quality Control/Quality Assurance:

Is reference toxicant data available?			
Was reference toxicant test within acceptable bounds?			
What date was reference toxicant test run (MM/DD/YYYY)?			
Other (describe)			

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

Yes ☒ No

If yes, describe: _____

E.4. Summary of Submitted Biomonitoring Test Information. If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

Date submitted: _____ (MM/DD/YYYY)

Summary of results: (see Instructions)

END OF PART E.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

FACILITY NAME AND PERMIT NUMBER:

Greensboro Lagoon AL0057193

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SUPPLEMENTAL APPLICATION INFORMATION

PART E. TOXICITY TESTING DATA

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- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
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If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete

E 1. Required Tests

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

____ chronic ☒ acute

E 2 Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

Test number: 1 Test number: 1A Test number: _____

a. Test information.

Test species & test method number	CERIODADPHNIA DUBIA	PIMEDNALAS PROMELAS	
Age at initiation of test	< 24 HR	7-8 DAYS	
Outfall number	001 T	001 T	
Dates sample collected	10/22/12 - 10/23/12		
Date test started	10/24/12 - 10/26/12	10/24/12 - 10/26/12	
Duration	48 HRS	45 HRS	

b. Give toxicity test methods followed.

Manual title	48 HR CERIODERPHNIA TOX TEST EPA METHOD # 2002.0	48 HR FATHEAD MINNOW TOX TEST EPA METHOD # 2000.0	
Edition number and year of publication			
Page number(s)			

c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.

24-Hour composite	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Grab			

d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)

Before disinfection	N/A	N/A	
After disinfection			
After dechlorination			

FACILITY NAME AND PERMIT NUMBER:

Greensboro Lagoon AL0057193

Form Approved 1/14/99
OMB Number 2040-0086Test number: 1Test number: 1A

Test number: _____

e. Describe the point in the treatment process at which the sample was collected.

Sample was collected:

EFFLUENT DISCHARGE

EFFLUENT DISCHARGE

f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.

Chronic toxicity

Acute toxicity

✓

✓

g. Provide the type of test performed.

Static

48 HR ACUTE SCREENING

48 HR ACUTE SCREENING

Static-renewal

Flow-through

h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.

Laboratory water

MHRW

MHRW

Receiving water

i. Type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.

Fresh water

Salt water

j. Give the percentage effluent used for all concentrations in the test series.

7%

7%

k. Parameters measured during the test. (State whether parameter meets test method specifications)

pH

7.47-7.72

7.47-7.93

Salinity

Temperature

24.6°C - 25.8°C

24.6°C - 25.4°C

Ammonia

Dissolved oxygen

8.0-8.6

7.9-8.6

l. Test Results.

Acute:

Percent survival in 100%
effluent

%

%

%

LC₅₀

95% C.I.

%

%

%

Control percent survival

%

%

%

Other (describe)

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Chronic:

NOEC	%	%	%
IC ₂₅	%	%	%
Control percent survival	%	%	%
Other (describe)			

m. Quality Control/Quality Assurance.

Is reference toxicant data available?			
Was reference toxicant test within acceptable bounds?			
What date was reference toxicant test run (MM/DD/YYYY)?			
Other (describe)			

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

Yes ☒ No

If yes, describe:

E.4. Summary of Submitted Biomonitoring Test Information. If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

Date submitted: (MM/DD/YYYY)

Summary of results: (see instructions)

END OF PART E.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

FACILITY NAME AND PERMIT NUMBER:

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SUPPLEMENTAL APPLICATION INFORMATION

PART E. TOXICITY TESTING DATA

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

E.1. Required Tests.

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

____ chronic ☒ acute

E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

Test number: 1Test number: 1A

Test number: _____

a. Test information.

Test species & test method number	CERIODAPHA NIA DUBIA	PIMEPHALUS PROMELAS	
Age at initiation of test	< 24 HR	2-3 DAYS	
Outfall number	001T	001T	
Dates sample collected	10/09/11 - 10/10/11	10/09/11 - 10/10/11	
Date test started	10/12/11 - 10/14/11	10/12/11 - 10/14/11	
Duration	48 HRS	46 HRS	

b. Give toxicity test methods followed.

Manual title	48 HR CERIODAPHA NIA TOX TEST EPA METHOD # 200.2.10	48 HR PIMEPHALUS PROMELAS TOX TEST EPA METHOD # 200.2.10	
Edition number and year of publication			
Page number(s)			

c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.

24-Hour composite	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Grab			

d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)

Before disinfection	N/A	N/A	
After disinfection			
After dechlorination			

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OMB Number 2040-0086Test number: 1Test number: 1A

Test number: _____

e. Describe the point in the treatment process at which the sample was collected.

Sample was collected:

EFFLUENT DISCHARGE EFFLUENT DISCHARGE

f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.

Chronic toxicity

Acute toxicity

g. Provide the type of test performed.

Static

48 HR ACUTE SCREENING 48 HR ACUTE SCREENING

Static-renewal

Flow-through

h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.

Laboratory water

MHRWMHRW

Receiving water

i. Type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.

Fresh water

Salt water

j. Give the percentage effluent used for all concentrations in the test series.

1%1%

k. Parameters measured during the test. (State whether parameter meets test method specifications)

pH

7.26 - 7.617.47 - 7.62

Salinity

Temperature

24.0°C - 24.2°C24.2°C - 24.7°C

Ammonia

Dissolved oxygen

8.1 - 8.68.2 - 8.6

l. Test Results.

Acute:

Percent survival in 100%
effluent

%

%

%

LC₅₀

95% C.I.

%

%

%

Control percent survival

100

%

100

%

%

Other (describe)

1%95%100%

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Chronic:

NOEC	%	%	%
IC ₂₅	%	%	%
Control percent survival	%	%	%
Other (describe)			

m. Quality Control/Quality Assurance.

Is reference toxicant data available?

Was reference toxicant test within acceptable bounds?

What date was reference toxicant test run (MM/DD/YYYY)?

Other (describe)

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

Yes ☒ No

If yes, describe:

E.4. Summary of Submitted Blomonitoring Test Information. If you have submitted blomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

Date submitted: (MM/DD/YYYY)

Summary of results: (see instructions)

END OF PART E.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

FACILITY NAME AND PERMIT NUMBER:

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SUPPLEMENTAL APPLICATION INFORMATION

PART E. TOXICITY TESTING DATA

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

E.1. Required Tests.

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

___ chronic ☒ acute

E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

Test number: 1 Test number: 1A Test number: _____

a. Test information

Test species & test method number	CERIODAPHRINA DUBIA	PIMEPHALIS PROMELAS	
Age at initiation of test	< 24 HR	2-3 DAYS	
Outfall number	001T	001T	
Dates sample collected	10/4/10 - 10/5/10	10/4/10 - 10/5/10	
Date test started	10/6/10 - 10/8/10	10/6/10 - 10/8/10	
Duration	47 HRS	46.5 HRS	

b. Give toxicity test methods followed.

Manual title	48 HR CERIODAPHRINA TOX TEST EPA METHOD # 200.2.0	48 HR FATHEAD MINNOW TOX TEST EPA METHOD # 200.2.0	
Edition number and year of publication			
Page number(s)			

c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.

24-Hour composite	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Grab			

d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)

Before disinfection	N/A	N/A	
After disinfection			
After dechlorination			

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OMB Number 2040-0086Test number: 1Test number: 1A

Test number: _____

e. Describe the point in the treatment process at which the sample was collected.

Sample was collected:

EFFLUENT DISCHARGE EFFLUENT DISCHARGE

f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both

Chronic toxicity

Acute toxicity

✓

✓

g. Provide the type of test performed.

Static

48 HR ACUTE SCREENING 48 HR ACUTE SCREENING

Static-renewal

Flow-through

h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.

Laboratory water

MHRWMHRW

Receiving water

i. Type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.

Fresh water

Salt water

j. Give the percentage effluent used for all concentrations in the test series.

1%1%

k. Parameters measured during the test. (State whether parameter meets test method specifications)

pH

7.45 - 7.677.43 - 7.67

Salinity

Temperature

24.0°C - 25.8°C24.0°C - 25.8°C

Ammonia

Dissolved oxygen

8.0 8.47.9 8.4

l. Test Results.

Acute:

Percent survival in 100%
effluent

%

%

%

LC₅₀

95% C.I.

%

%

%

Control percent survival

100

%

100

%

%

Other (describe)

1%100%100%

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Chronic:

NOEC	%	%	%
IC ₂₅	%	%	%
Control percent survival	%	%	%
Other (describe)			

m. Quality Control/Quality Assurance.

Is reference toxicant data available?			
Was reference toxicant test within acceptable bounds?			
What date was reference toxicant test run (MM/DD/YYYY)?			
Other (describe)			

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?☐ Yes ☒ No

If yes, describe: _____

E.4. Summary of Submitted Biomonitoring Test Information. If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

Date submitted: _____ (MM/DD/YYYY)

Summary of results: (see instructions)

END OF PART E.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

FACILITY NAME AND PERMIT NUMBER:

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SUPPLEMENTAL APPLICATION INFORMATION

PART E. TOXICITY TESTING DATA

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

E.1. Required Tests.

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

____ chronic ☒ acute

E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

Test number: 1 Test number: 1A Test number: _____

a. Test information.

Test species & test method number	CERIODADPHALIA DUBIA	PIMEPHALUS PROMELAS	
Age at initiation of test	< 24 HR	2-3 DAYS	
Outfall number	001T	001T	
Dates sample collected	10/20/09	10/20/09	
Date test started	10/21/09 - 10/23/09	10/21/09 - 10/23/09	
Duration	46 HRS	47 HRS	

b. Give toxicity test methods followed.

Manual title	48 HR CERIODAPHNIA TOX TEST EPA METHOD # 2002.10	48 HR PIMEPHALUS MINNER TOX TEST EPA METHOD # 2000.10	
Edition number and year of publication			
Page number(s)			

c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.

24-Hour composite	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Grab			

d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)

Before disinfection	N/A	N/A	
After disinfection			
After dechlorination			

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OMB Number 2040-0086Test number: 1Test number: 1A

Test number: _____

e. Describe the point in the treatment process at which the sample was collected.

Sample was collected:

EFFLUENT DISCHARGE

EFFLUENT DISCHARGE

f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.

Chronic toxicity

Acute toxicity

g. Provide the type of test performed.

Static

48 HR ACUTE SCREENING

48 HR ACUTE SCREENING

Static-renewal

Flow-through

h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.

Laboratory water

MHRW

MHRW

Receiving water

i. Type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.

Fresh water

Salt water

j. Give the percentage effluent used for all concentrations in the test series.

1%

1%

k. Parameters measured during the test. (State whether parameter meets test method specifications)

pH

7.40 - 7.75

7.36 - 7.75

Salinity

Temperature

25.0°C - 25.5°C

25.0°C - 25.5°C

Ammonia

Dissolved oxygen

7.6 - 9.4

7.1 - 9.4

l. Test Results.

Acute:

Percent survival in 100% effluent	%	%	%
LC ₅₀			
95% C.I.	%	%	%
Control percent survival	100 %	95 %	%
Other (describe) 1%	100	100	

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Chronic:

NOEC	%	%	%
IC ₂₅	%	%	%
Control percent survival	%	%	%
Other (describe)			

m. Quality Control/Quality Assurance.

Is reference toxicant data available?			
Was reference toxicant test within acceptable bounds?			
What date was reference toxicant test run (MM/DD/YYYY)?			
Other (describe)			

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

Yes ☐ No ☒ If yes, describe: _____

E.4. Summary of Submitted Biomonitoring Test Information. If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

Date submitted: _____ (MM/DD/YYYY)

Summary of results: (see instructions)

END OF PART E.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

FACILITY NAME AND PERMIT NUMBER:

Greensboro Lagoon AL0057193

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SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

GENERAL INFORMATION:

F.1. Pretreatment Program. Does the treatment works have, or is it subject to, an approved pretreatment program?

☒ Yes ☐ No N/A

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.

- a. Number of non-categorical SIUs. _____
- b. Number of CIUs. _____

SIGNIFICANT INDUSTRIAL USER INFORMATION:

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. Significant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: Heartland Alabama DBA Heartland Catfish

Mailing Address: P.O. Box 490
Greensboro, AL 36744

F.4. Industrial Processes. Describe all of the industrial processes that affect or contribute to the SIU's discharge.

Cleaning of Catfish

F.5. Principal Product(s) and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): Catfish processing ~~PACKAGING ONLY~~

Raw material(s): ~~live catfish~~

F.6. Flow Rate.

- a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

_____ gpd (____ continuous or ____ intermittent)

- b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

33,333 gpd (____ continuous or ____ intermittent) (± 1,000,000 MG / MO)

F.7. Pretreatment Standards. Indicate whether the SIU is subject to the following:

- a. Local limits _____ Yes ☒ No
- b. Categorical pretreatment standards _____ Yes ☒ No

If subject to categorical pretreatment standards, which category and subcategory?

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F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU. Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

☐ Yes ☐ No If yes, describe each episode.

RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:

F.9. RCRA Waste. Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe? ☐ Yes ☒ No (go to F.12.)

F.10. Waste Transport. Method by which RCRA waste is received (check all that apply):

☐ Truck ☐ Rail ☐ Dedicated Pipe

F.11. Waste Description. Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA Hazardous Waste Number

Amount

Units

CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:

F.12. Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

☐ Yes (complete F.13 through F.15.) ☒ No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

F.13. Waste Origin. Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years).

F.14. Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

F.15. Waste Treatment.

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

☐ Yes ☐ No

If yes, describe the treatment (provide information about the removal efficiency):

b. Is the discharge (or will the discharge be) continuous or intermittent?

☐ Continuous

☐ Intermittent

If intermittent, describe discharge schedule.

END OF PART F.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:

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SUPPLEMENTAL APPLICATION INFORMATION

PART G. COMBINED SEWER SYSTEMS

If the treatment works has a combined sewer system, complete Part G.

G.1. System Map. Provide a map indicating the following: (may be included with Basic Application Information)

- All CSO discharge points.
- Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding natural resource waters).
- Waters that support threatened and endangered species potentially affected by CSOs.

G.2. System Diagram. Provide a diagram, either in the map provided in G.1. or on a separate drawing, of the combined sewer collection system that includes the following information:

- Locations of major sewer trunk lines, both combined and separate sanitary.
- Locations of points where separate sanitary sewers feed into the combined sewer system.
- Locations of in-line and off-line storage structures.
- Locations of flow-regulating devices.
- Locations of pump stations.

CSO OUTFALLS:

Complete questions G.3 through G.6 once for each CSO discharge point.

G.3. Description of Outfall.

- Outfall number _____
- Location
(City or town, if applicable) _____ (Zip Code) _____
(County) _____ (State) _____
(Latitude) _____ (Longitude) _____
- Distance from shore (if applicable) _____ ft.
- Depth below surface (if applicable) _____ ft.
- Which of the following were monitored during the last year for this CSO?
____ Rainfall ____ CSO pollutant concentrations ____ CSO frequency
____ CSO flow volume ____ Receiving water quality
- How many storm events were monitored during the last year? _____

G.4. CSO Events.

- Give the number of CSO events in the last year.
_____ events (____ actual or ____ approx.)
- Give the average duration per CSO event.
_____ hours (____ actual or ____ approx.)

FACILITY NAME AND PERMIT NUMBER:

Greensboro Lagoon AL0057193

Form Approved 1/14/99
OMB Number 2040-0086

- c. Give the average volume per CSO event.

_____ million gallons (____ actual or ____ approx.)

- d. Give the minimum rainfall that caused a CSO event in the last year.

_____ inches of rainfall

G.5. Description of Receiving Waters.

- a. Name of receiving water: _____

- b. Name of watershed/river/stream system: _____

United States Soil Conservation Service 14-digit watershed code (if known): _____

- c. Name of State Management/River Basin: _____

United States Geological Survey 8-digit hydrologic cataloging unit code (if known): _____

G.6. CSO Operations.

Describe any known water quality impacts on the receiving water caused by this CSO (e.g., permanent or intermittent beach closings, permanent or intermittent shell fish bed closings, fish kills, fish advisories, other recreational loss, or violation of any applicable State water quality standard).

END OF PART G.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM
2A YOU MUST COMPLETE.

Additional information, if provided, will appear on the following pages.

SUPPLEMENTARY INFORMATION
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
PERMIT APPLICATION FORM 188- Municipal, Semi-Public & Private Facilities

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
WATER DIVISION – MUNICIPAL PERMIT SECTION
POST OFFICE BOX 301463
MONTGOMERY, ALABAMA 36130-1463

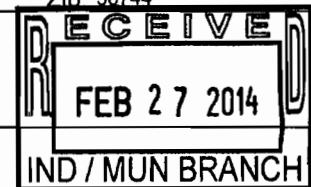
INSTRUCTIONS: APPLICATIONS SHOULD BE TYPED OR PRINTED IN INK AND SUBMITTED TO THE DEPARTMENT. PLEASE CONTINUE ON AN ATTACHED SHEET OF PAPER IF INSUFFICIENT SPACE IS AVAILABLE TO ADDRESS ANY ITEM BELOW. PLEASE MARK N/A IN THE APPROPRIATE BOX WHEN AN ITEM IS NON-APPLICABLE TO THE APPLICANT.

PURPOSE OF THIS APPLICATION

- | | |
|---|--|
| <input type="checkbox"/> INITIAL PERMIT APPLICATION FOR NEW FACILITY
<input type="checkbox"/> MODIFICATION OF EXISTING PERMIT
<input type="checkbox"/> REVOCATION & REISSUANCE OF EXISTING PERMIT | <input type="checkbox"/> INITIAL PERMIT APPLICATION FOR EXISTING FACILITY
<input checked="" type="checkbox"/> REISSUANCE OF EXISTING PERMIT |
|---|--|

SECTION A – GENERAL INFORMATION

1. Facility Name: Greensboro Lagoon
 - a. Operator Name: Lee Singletary
 - b. Is the operator identified in 1.a, the owner of the facility? Yes ☐ No ☒
If no, provide name and address of the operator and submit information indicating the operator's scope of responsibility for the facility.
Lee Singletary, 1101 Main St., Greensboro, AL / Wastewater Grease II Operator
 - c. Name of Permittee* if different than Operator: Utilities Board of the City of Greensboro
**Permittee will be responsible for compliance with the conditions of the permit*
2. NPDES Permit Number AL 0057193 (Not applicable if initial permit application)
3. Facility Location: (**Attach a map with location marked; street, route no. or other specific identifier**)
Street: 649 County Road 19
City: Greensboro County: Hale State: AL Zip: 36744
Facility (Front Gate) Location: Latitude (Deg Min Sec): 32° 43' 22.5" N Longitude (Deg. Min Sec): 87° 35' 47.8" W
4. Facility Mailing Address (Street or Post Office Box): Post Office Box 546
City: Greensboro County: Hale State: AL Zip: 36744
5. Responsible Official (as described on page 7 of this application):
Name and Title: Mr. John Jay, Jr. Superintendent
Address: 1101 Main St.
City: Greensboro State: AL Zip: 36744
Phone Number: 334-624-8448
Email Address: (Optional): fwilliams0624@bellsouth.net



6. Designated Facility/DMR Contact:

Name and Title: Mr. John Jay, Utilities Superintendent

Phone Number: 334-624-8448

DMR Email Address (Optional – for receipt of blank DMR Forms): fwilliams0624@bellsouth.net

7. Please complete this section if the Applicant's business entity is a Proprietorship or limited liability Corporation with a responsible official not listed in Item 5.

a) Proprietor:

Name: NA

Address: _____

City: _____ State: _____ Zip: _____

8. Permit numbers for Applicant's previously issued NPDES Permits and identification of any other State Environmental Permits presently held by the Applicant within the State of Alabama:

<u>Permit Name</u>	<u>Permit Number</u>	<u>Held by</u>
<u>Greensboro Lagoon</u>	<u>AL0057193</u>	<u>Utilities Board of the City of Greensboro</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Identify all Administrative Complaints, Notices of Violation, Directives, or Administrative Orders, Consent Decrees, or Litigation concerning water pollution or other permit violations, if any against the Applicant within the State of Alabama in the past five years (attach additional sheets if necessary):

<u>Facility Name</u>	<u>Permit Number</u>	<u>Type of Action</u>	<u>Date of Action</u>
<u>Greensboro Lagoon</u>	<u>AL0057193</u>	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

SECTION B – WASTEWATER DISCHARGE INFORMATION

1. List the following historical monthly flow rates recorded for the past five years for each outfall:

<u>Outfall Number</u>	<u>Highest in Last 12 Months MGD</u>	<u>Highest Daily Flow MGD</u>	<u>Average Flow MGD</u>
<u>001-2</u>	<u>2.06</u>	<u>4.52</u>	<u>0.797</u>
_____	_____	_____	_____

2. Report E-coli (Freshwater) or Enterococci (Coastal Waters) monitoring results for the past five years for each outfall if available:

Outfall Number	E-coli or Enterococci	Maximum Daily E-coli / Enterococci Discharge (per 100 mi)	Maximum Monthly Average E-coli / Enterococci Discharge (per 100 mi)	No. of Analyses	Analytical Method	ML/MDL
001-2	E-coli	98	53	18	SM 9222D	2000

3. Attached a process flow schematic of the treatment process, including the size of each unit operation.
4. Do you have, or plan to have, automatic sampling equipment or continuous wastewater flow metering equipment at this facility?

Current:	Flow Metering	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
	Sampling Equipment	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Planned:	Flow Metering	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
	Sampling Equipment	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>

If so, please attach a schematic diagram of the sewer system indicating the present or future location of this equipment and describe the equipment below:

the current equipment is located at the intake pump station and effluent pump station wet well

5. Are any wastewater collection or treatment modifications or expansions planned during the next three years that could alter wastewater volumes or characteristics (Note: Permit Modification may be required)? Yes ☐ No ☒

Briefly describe these changes and any potential or anticipated effects on the wastewater quality and quantity: (Attach additional sheets if needed.)

SECTION C – WASTE STORAGE AND DISPOSAL INFORMATION

Describe the location of all sites used for the storage of solids or liquids that have any potential for accidental discharge to a water of the state, either directly or indirectly via storm sewer, municipal sewer, municipal wastewater treatment plants, or other collection or distribution systems that are located at or operated by the subject existing or proposed NPDES-permitted facility. Indicate the location of any potential release areas and provide a map or detailed narrative description of the areas of concern as an attachment to this application:

Description of Waste

Description of Storage Location

Describe the location of any sites used for the ultimate disposal of solid or liquid waste materials or residuals (e.g. sludges) generated by any wastewater treatment system located at the facility.

Description of Waste

Quantity
(lbs/day)

Disposal Method*

*Indicate any wastes disposed at an off-site treatment facility and any wastes that are disposed on-site

SECTION D – INDUSTRIAL INDIRECT DISCHARGE CONTRIBUTORS

1. List the existing and proposed industrial source wastewater contributions to the municipal wastewater treatment system (Attach other sheets if necessary)

Company Name	Description of Industrial Wastewater	Existing or Proposed	Flow (MGD)	Subject to S/D Permit? Y/N
Heinrich Callison	BOD, Oil Grease	EXISTING	0.033	Y

2. Are industrial wastewater contributions regulated via a locally approved sewer use ordinance ~~YES~~? If so, please attach a copy of the ordinance. **NO**

SECTION E – COASTAL ZONE INFORMATION

Is the discharge(s) located within the 10-foot elevation contour and within the limits of Mobile or Baldwin County?
Yes ☐ No ☒ If yes, then complete items A through M below:

- | | YES | NO |
|--|--------------------------|--------------------------|
| A. Does the project require new construction? | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Will the project be a source of new air emissions? | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Does the project involve dredging and/or filling of a wetland area or water way? | <input type="checkbox"/> | <input type="checkbox"/> |
| Has the Corps of Engineers (COE) permit been issued? | <input type="checkbox"/> | <input type="checkbox"/> |
| Corps Project Number _____ | | |
| D. Does the project involve wetlands and/or submersed grassbeds? | <input type="checkbox"/> | <input type="checkbox"/> |
| E. Are oyster reefs located near the project site?
(Include a map showing project and discharge location with respect to oyster reefs) | <input type="checkbox"/> | <input type="checkbox"/> |
| F. Does the project involve the site development, construction and operation of an energy facility as defined in ADEM Admin. Code R. 335-8-1-.02(bb)? | <input type="checkbox"/> | <input type="checkbox"/> |
| G. Does the project involve mitigation of shoreline or coastal area erosion? | <input type="checkbox"/> | <input type="checkbox"/> |
| H. Does the project involve construction on beaches or dunes areas? | <input type="checkbox"/> | <input type="checkbox"/> |
| I. Will the project interfere with public access to coastal waters? | <input type="checkbox"/> | <input type="checkbox"/> |
| J. Does the project lie within the 100-year floodplain? | <input type="checkbox"/> | <input type="checkbox"/> |
| K. Does the project involve the registration, sale, use, or application of pesticides? | <input type="checkbox"/> | <input type="checkbox"/> |
| L. Does the project propose or require construction of a new well or to alter an existing groundwater well to pump more than 50 gallons per day (GPD)? | <input type="checkbox"/> | <input type="checkbox"/> |
| M. Has the applicable permit for groundwater recovery or for groundwater well installation been obtained? | <input type="checkbox"/> | <input type="checkbox"/> |

SECTION F – ANTI-DEGRADATION EVALUATION

It is the applicant's responsibility to demonstrate the social and economic importance of the proposed activity, if subject to antidegradation requirements. In accordance with 40 CFR 131.12 and Section 335-6-10-.04 of the Alabama Department of Environmental Management Administrative Code, the following information must be provided, if applicable. If further information is required to make this demonstration, attach additional sheets to the application.

1. Is this a new or increased discharge that began after April 3, 1991? Yes ☐ No ☒.

If "yes", complete question 2 below. If "no", do not complete this section.

2. Has an Anti-Degradation Analysis been previously conducted and submitted to the Department for the new or increased discharge referenced in question 1? Yes ☐ No ☒.

If "no" and the discharge is to a Tier II waterbody as defined in ADEM Admin. Code r. 335-6-10-.12(4), complete questions A through F below and also ADEM forms 311 and 312 or 313, whichever is applicable, (attached). Form 312 or 313, whichever is applicable, must be provided for each treatment discharge alternative considered technically viable. If "yes", do not complete this section.

Information required for new or increased discharges to high quality waters:

- A. What environmental or public health problem will the discharger be correcting?
- B. Explain if and to what degree the discharger will be increasing employment as a result of the proposed discharge, either at its existing facility or as the result of the start-up of a related new facility or industry.
- C. Explain if and to what degree the discharge will prevent employment reductions?
- D. Describe any additional state or local taxes that the prospective discharger will be paying.
- E. Describe any public service the discharger will be providing to the community.
- F. Describe the economic or social benefit the discharger will be providing to the community.

SECTION G – EPA Application Forms

All Applicants must submit certain EPA permit application forms. More than one application form may be required from a municipal facility depending on the number and types of discharges or outfalls. The EPA application forms are found on the Department's website at <http://www.adem.state.al.us/> and are also listed in Attachment 4.

SECTION H– ENGINEERING REPORT/BMP PLAN REQUIREMENTS

Any Engineering Report or Best Management Practice (BMP) Plans required to be submitted to ADEM by the applicant must be in accordance with ADEM 335-6-6-.08(i) & (j).

SECTION I– RECEIVING WATERS

Receiving Water(s)	303(d) Segment? (Y / N)	Included in TMDL?* (Y / N)

*If a TMDL Compliance Schedule is requested the following should be attached as supporting documentation:

(1) Justification for the proposed Compliance Schedule (e.g. time for design and installation of control equipment, etc.); (2) Monitoring results for the pollutant(s) of concern which have not previously been submitted to the Department (sample collection dates, analytical results (mass and concentration), methods utilized, MDL/ML, etc. should be reported as available); (3) Requested interim limitations, if applicable; (4) Date of final compliance with the TMDL limitations; and (5) Any other additional information available to support the requested compliance schedule.

SECTION J – APPLICATION CERTIFICATION

THE INFORMATION CONTAINED IN THIS FORM MUST BE CERTIFIED BY A RESPONSIBLE OFFICIAL AS DEFINED IN ADEM ADMINISTRATIVE RULE 335-6-6-.09 "SIGNATORY REQUIREMENTS FOR PERMIT APPLICATIONS" (SEE BELOW).

"I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS."

"I FURTHER CERTIFY UNDER PENALTY OF LAW THAT THE RESULTS OF ANY ANALYSES REPORTED AS LESS THAN DETECTABLE IN THIS APPLICATION OR IN ATTACHMENTS THERETO WERE PERFORMED USING THE EPA APPROVED TEST METHOD HAVING THE LOWEST DETECTION LIMIT READILY ACHIEVABLE FOR THE SUBSTANCE TESTED."

SIGNATURE OF
RESPONSIBLE OFFICIAL: _____

DATE
SIGNED: _____



2-25-14

(TYPE OR PRINT)

John C. Jay, Jr.

NAME OF RESPONSIBLE OFFICIAL: _____

John C. Jay, Jr.

OFFICIAL TITLE OF RESPONSIBLE OFFICIAL: _____

Superintendent

MAILING ADDRESS: _____

P.O. Box 546, Greensboro, AL 36744

AREA CODE & PHONE NUMBER: _____

334-624-8448

SIGNATORY REQUIREMENTS FOR PERMIT APPLICATIONS

Responsible official is defined as follows:

1. In the case of a corporation, by a principal executive officer of at least the level of vice president, or a manager assigned or delegated in accordance with corporate procedures, with such delegation submitted in writing if required by the Department, who is responsible for manufacturing, production, or operating facilities and is authorized to make management decisions which govern the operation of the regulated facility
2. In the case of a partnership, by a general partner
3. In the case of a sole proprietorship, by the proprietor, or
4. In the case of a municipal, state, federal, or other public facility, by either a principal executive officer, or a ranking elected official.
5. In the case of a private or semi-public facility, the responsible official is either a principal executive officer or the owner of the corporation or other entity.

Attachment 1 to Supplementary Form ADEM Form 311

Alternatives Analysis

Applicant/Project: City of Greensboro

All new or expanded discharges (except discharges eligible for coverage under general permits) covered by the NPDES permitting program are subject to the provisions of ADEM's antidegradation policy. Applicants for such discharges to Tier 2 waters are required to demonstrate "... that the proposed discharge is necessary for important economic or social development." As a part of this demonstration, the applicant must complete an evaluation of the discharge alternatives listed below, including a calculation of the total annualized project costs for each technically feasible alternative (using ADEM Form 312 for public-sector projects and ADEM Form 313 for private-sector projects). Alternatives with total annualized project costs that are less than 110% of the total annualized project costs for the Tier 2 discharge proposal are considered viable alternatives.

Alternative	Viable	Non-Viable	Comment
1 Land Application			
2 Pretreatment/Discharge to POTW			
3 Relocation of Discharge			
4 Reuse/Recycle			
5 Process/Treatment Alternatives			
6 On-site/Sub-surface Disposal			
<i>(other project-specific alternatives considered by the applicant; attach additional sheets if necessary)</i>			
7			
8			
9			

Pursuant to ADEM Administrative Code Rule 335-6-3-.04, I certify on behalf of the applicant that I have completed an evaluation of the discharge alternatives identified above, and reached the conclusions indicated.

Signature: _____
(Professional Engineer)

Date: _____

(Supporting documentation to be attached, referenced, or otherwise handled as appropriate.)

ADEM Form 311 3/02

Attachment 2 to Supplementary Form

Calculation of Total Annualized Project Costs for Public-Sector Projects

A. Capital Costs

Capital Cost of Project \$ _____

Other One-Time Costs of Project (Please List, if any):

\$ _____

\$ _____

\$ _____

Total Capital Costs (Sum column) \$ _____ (1)

Portion of Capital Costs to be Paid for with Grant Monies \$ _____ (2)

Capital Costs to be Financed [Calculate: (1) – (2)] \$ _____ (3)

Type of Financing (e.g., G.O. bond, revenue bond, bank loan) _____

Interest Rate for Financing (expressed as decimal) _____ (i)

Time Period of Financing (in years) _____ (n)

Annualization Factor = $\frac{i}{(1+i)^n - 1} + i$ _____ (4)

Annualized Capital Cost [Calculate: (3) x (4)] _____ (5)

B. Operating and Maintenance Costs

Annual Costs of Operation and Maintenance (including but not limited to: monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement.) (Please list below.)

\$ _____

\$ _____

\$ _____

\$ _____

Total Annual O & M Costs (Sum column) \$ _____ (6)

C. Total Annual Cost of Pollution Control Project

Total Annual Cost of Pollution Control Project [(5) + (6)]

\$ _____ (7)

Attachment 3 to Supplementary Form ADEM Form 313

Calculation of Total Annualized Project Costs for Private-Sector Projects

Capital Costs to be Financed (Supplied by applicant)	\$ _____ (1)
Interest rate for Financing (Expressed as a decimal)	_____ (i)
Time Period of Financing (Assume 10 years*)	10 years _____ (n)
Annualization Factor = $\frac{i}{(1+i)^{10} - 1} + i$	_____ (2)
Annualized Capital Cost [Calculate: (1) x (2)]	\$ _____ (3)
Annual Cost of Operation and Maintenance (including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement)**	\$ _____ (4)
Total Annual Cost of Pollution Control Project [(3) + (4)]	<div style="border: 1px solid black; padding: 5px; display: inline-block;">\$ _____ (5)</div>

- * While actual payback schedules may differ across projects and companies, assume equal annual payments over a 10-year period for consistency in comparing projects.
- ** For recurring costs that occur less frequently than once a year, pro rate the cost over the relevant number of years (e.g., for pumps replaced once every three years, include one-third of the cost in each year).

Attachment 4 to Supplementary Form

NPDES PROGRAM PERMIT APPLICATION FORMS ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

TYPE DISCHARGE	ADEM FORMS	EPA FORMS
New or existing once through non-contact cooling water and/or cooling tower blowdown, and/or sanitary wastewater (non-process wastewater only). Note: POTWs and privately owned domestic treatment works should use Form 2A.	Supplemental Information Form 187 – (Industrial) or Form 188 (Municipal)	Forms 1 and 2E
Existing discharges of process wastewater	Supplemental Information Form 187 – (Industrial) or Form 188 (Municipal)	Forms 1 and 2C
New discharges of process wastewater	Supplemental Information Form 187 – (Industrial) or Form 188 (Municipal)	Forms 1 and 2D
New or existing discharges composed entirely of stormwater meeting the EPA definition of stormwater associated with industrial activity	Supplemental Information Form 187 – (Industrial) or Form 188 (Municipal)	Forms 1 and 2F
New or existing discharges composed of stormwater meeting the EPA definition of stormwater associated with industrial activity, and any other non-stormwater discharges.	Supplemental Information Form 187 – (Industrial) or Form 188 (Municipal)	Forms 1 and 2F and, as appropriate, Forms 2E, 2C, and/or 2D
New or existing Publicly-Owned Treatment Works (POTWs) and Privately-Owned Treatment Works composed of sanitary wastewater	Supplemental Information Form 187 – (Industrial) or Form 188 (Municipal)	Forms 1 and 2A
New or existing land application of process wastewater. Form 2F is required for stormwater runoff from the land application site, if the site is not completely bermed to prevent runoff.	Supplemental Information Form 187 – (Industrial)	Forms 1, 2F, and 2C or 2D, as appropriate
New or existing land application of sanitary wastewater. Form 2F is required for stormwater runoff from the land application site, if the site is not completely bermed to prevent runoff.	Supplemental Information Form 187 – (Industrial) or Form 188 (Municipal)	Forms 1, 2A, and 2F

Testing requirements: Test procedures for all analyses shall conform to 40 CFR Part 136 or an alternate method specifically approved by the Department. If more than one method of analysis is approved, then the method having the lowest detection level shall be used.

REQUIRED INFORMATION FOR MIXING ZONE MODELING

GENERAL INFORMATION

1. Applicant Name: Utilities Board of the City of Greensboro
2. Permit No.: Greensboro Lagoon
3. Project Name (if different from applicant): _____
4. Contact name and phone number: John Jay, Jr. (334)624-8448
5. Date submitted: _____
5. Facility type (new, existing or upgrade): existing

AMBIENT CONDITIONS

1. Receiving waterbody: Black Warrior River
2. Width of waterbody at discharge point (m): 117.35
3. Depth of waterbody at discharge point (m): 7
4. Average depth of waterbody at discharge point (m): 7

DISCHARGE TYPE:

Submerged endpipe or submerged multiport diffuser? Submerged end-pipe

Effluent Density (kg/m^3): _____

Note: Fill out box A below for endpipe discharges; box B for diffuser discharges.

A. DISCHARGE CONDITIONS FOR SUBMERGED ENDPIPE DISCHARGES

1. Nearest bank (right or left) to the outfall looking downstream: left
2. Distance from nearest bank to discharge (m): 16
3. Endpipe diameter (m): 0.305
4. Contraction ratio (if known): _____
5. Height of discharge above stream bottom (m): 2.5
6. Effluent flow rate (mgd): 2

B. DISCHARGE CONDITIONS FOR SUBMERGED MULTIPORT DIFFUSERS

NOTE:

Diffuser length is defined as the distance between the first and last diffuser ports.

1. Diffuser length (m): _____
2. Nearest bank (right or left) to the outfall looking downstream: _____
3. Distance from nearest bank to first diffuser port (m): _____
4. Total number of ports: _____
5. Diameter of a single port (m): _____
6. Distance between adjacent ports (i.e., port spacing, m): _____
7. Height of ports above stream bottom (m): _____
8. Port contraction ratio (if known): _____
9. Diameter of diffuser manifold (m): _____
10. Effluent flow rate (mgd): _____

SPECIAL REQUIREMENTS

1. Please submit a map displaying the outfall location along with the appropriate latitude/longitude coordinates.
2. Please submit the appropriate engineering plans that depict the outfall configuration.



2607 Commerce Boulevard
Birmingham, AL 35210
205 951-3400
1-800-23WATER
FAX 205 951-0808
www.EMCbham.com

April 10th, 2015

Ms. Sandra Lee
Alabama Department of Environmental Management (ADEM)

Re: City of Greensboro Utilities

Dear Ms. Lee,

This letter is in regards to the April 2014 permit application samples for the City of Greensboro utilities. While all quality control procedures were followed for the set of samples which contained lab number 20141035 (Cu = 3.94 mg/L), this value seems unusually high in comparison to the copper values for the week previous, April 15th (Cu = 0.19 mg/L) and the following week, April 29th (Cu = 0.08 mg/L). The reason for this atypical result cannot be discerned at this time; but it could be due to anything from sample contamination to many other countless possibilities. So while we are unable to confidently state why this result is what it is, we can state that the number is higher by a factor of at least 20 than other results for that same location around the same time period.

Sincerely,

A handwritten signature in black ink that reads 'Seyvon Brown'.

Seyvon Brown
Lab Manager
Enviro Management Co.

Form Approved. QMB No. 2040-0088
Approval expires 5-31-92

FORM
2F
NPDES



Application for Permit to Discharge Storm Water Discharges Associated with Industrial Activity

Public reporting burden for this application is estimated to average 28.6 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of this collection of information, or suggestions for improving this form, including suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

II. Improvements

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental program's which may affect the discharge described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

13. You may attach additional sheets describing any additional water pollution (or other environmental) projects which may affect your discharges) you now have underway or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

Attach a site map showing topography (or detailing the outline of drainage areas served by the outfall(s) covered in the application if a topographic map is unavailable) depicting the facility including: each of its intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall; each known past or present dross used for outdoor storage or disposal of significant materials, each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage, or disposal units (including each area not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which received storm water discharges from the facility.

Continued from the Front

IV. Narrative Description of Pollutant Sources

A. For each outfall, provide an estimate of the area (include units) of impervious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall.

Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)	Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)
	NA				

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas, and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

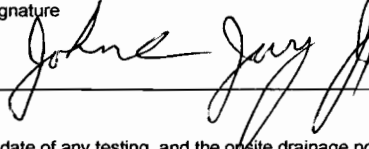
NA

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall Number	Treatment	List Codes from Table 2F-1

V. Nonstormwater Discharges

A. I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of nonstormwater discharges, and that all nonstormwater discharged from these outfall(s) are identified in either an accompanying Form 2C or Form 2E application for the outfall.

Name and Official Title (type or print)	Signature	Date Signed
John C. Jay, Jr. Superintendent		2-25-14

B. Provide a description of the method used, the date of any testing, and the on-site drainage points that were directly observed during a test.

NA

VI. Significant Leaks or Spills

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

VII. Discharge Information

A, B, C, & D: See instructions before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided.
Table VII-A, VII-B, VII-C are included on separate sheets numbers VII-1 and VII-2.

E. Potential discharges not covered by analysis – is any toxic pollutant listed in table 2F-2, 2F-3, or 2F-4, a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ Yes (list all such pollutants below)

☒ No (go to Section IX)

VIII. Biological Toxicity Testing Data

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ Yes (list all such pollutants below)

☒ No (go to Section IX)

IX. Contract Analysis Information

Were any of the analyses reported in Item VII performed by a contract laboratory or consulting firm?

☐ Yes (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)

☒ No (go to Section X)

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed

X. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

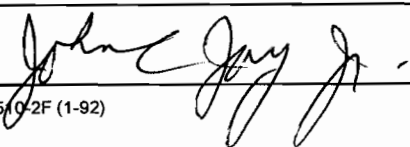
A. Name & Official Title (Type Or Print)

John C. Jay, Jr. Superintendent

B. Area Code and Phone No.

(334) 624-8448

C. Signature



D. Date Signed

2-25-14

Part A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Part B – List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Continue on Reverse

Continued from the Front

Part C - List each pollutant shown in Table 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

[illegible]

Part D – Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (gallons/minute or specify units)	6. Total flow from rain event (gallons or specify units)

7. Provide a description of the method of flow measurement or estimate.

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